Technical Report No. 45

# Development and Implementation of Prepayment Schemes in Rwanda

*March 2000*

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*In collaboration with:*
Development Associates, Inc. ■ Harvard School of Public Health ■
Howard University International Affairs Center ■ University Research Co., LLC


*Funded by*:
U.S. Agency for International Development

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**March 2000**

**Recommended Citation**

Schneider, Pia, François Diop, and Sosthene Bucyana. March 2000. *Development and Implementation of Prepayment Schemes in Rwanda.* Technical Report No. 45. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc.

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**Contract No.:** HRN-C-00-95-00024
**Project No.:** 936-5974.13

**Submitted to:** USAID/Kigali

and: Robert Emrey, COTR
Policy and Sector Reform Division
Office of Health and Nutrition
Center for Population, Health and Nutrition
Bureau for Global Programs, Field Support and Research
United States Agency for International Development

# Abstract

Nearly three-fourths of the Rwandan population falls below the poverty line. It is no surprise that a poor population consumes less health care when user fees are charged. Primary health care consultation rates for rural populations dropped to 0.28 per capita per year in 1998 and to 0.24 in 1999, prompting the Ministry of Health to test prepayment schemes in three districts. The schemes focus on improving equity in access to quality care for rural populations, strengthening financial management in health centers, and increasing community participation in health financing management. Members pay an annual premium of FRw. 2,500 per family of up to seven members. The benefit package includes all services and essential drugs provided in public and mission health centers and ambulance transfer to the district hospital where a limited package of services is offered. Prepayment schemes pay health centers a monthly capitation rate. The schemes are being evaluated in a quasi-experimental study using quantitative and qualitative data. Preliminary findings show that in the first six months, more than 50,000 individuals, or 4.5 percent of the target population, joined prepayment scheme plans. Members seek care more often than non-members and contribute a higher per capita contribution to health care. Because members seek care earlier, they need fewer drugs and recover faster, an observation supported by health center personnel. Prepayment schemes are a viable tool to improve financial autonomy in health centers where average fixed costs remain low, and members use care moderately.

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# Acronyms

| | |
|---|---|
| CAMERWA | *Centrale d'Achat des Médicaments Essentiels au Rwanda* (Center for Purchase of Essential Drugs for Rwanda) |
| CPI | Consumer Price Index |
| EU | European Union |
| GDP | Gross Domestic Product |
| HERA | Health Research for Action |
| MOH | Ministry of Health |
| NC | New Case Consultation |
| NHA | National Health Accounts |
| ONAPO | *Office National de la Population* (National Population Office) |
| PHR | Partnerships for Health Reform |
| PPS | Prepayment Schemes |
| SIS | *Système d'Information Sanitaire* (Health Information System) |
| USAID | United States Agency for International Development |
| WHO | World Health Organization |

## Exchange Rate

US 1$ = 360 FRw (1999)

# Acknowledgments

The development and implementation of prepayment schemes in Rwanda involves a large number of institutions and individuals. People of the following institutions have constantly contributed their efforts and time to make prepayment schemes possible in Rwanda:

The former Minister of Health Vincent Biruta and his successor, Ezechias Rwabuhihi

The director of the Directorate of Health Care, Thomas Karengera, and his staff

The director of the National Population Office (ONAPO) Maurice Bucagu and his staff

The directors of the Butare, Byumba, Gitarama, Kibungo and Kigali health regions and their staff

Other members of the steering committee for prepayment schemes, including Hertilan Inyarubuga, Camille Kalimwabo, Denis Porignon (WHO) and Martine Catapano (EU).

The head of the Division of Documentation and Research, Vianney Nizeyimana, and his staff.

The owners (bishops) of mission health care facilities in the regions of Butare, Byumba, Gitarama, Kibungo, and Kigali and their staff

The directors of the Bugesera, Byumba, Kabutare, Kabgayi, and Kibungo health districts and their staff

The directors of the district hospitals of Bugesera, Byumba, Kabutare, Kabgayi, and Kibungo and their staff

The Federations of Prepayment Schemes and all members of the 53 prepayment scheme bureaus in Byumba, Kabutare, and Kabgayi

All responsibles and staffs in the 53 participating health centers in the districts of Byumba, Kabutare, and Kabgayi

Also to be acknowledged are all contributions received from the participants of the community workshops, and from representatives of the following organizations working in the districts of Byumba, Kabutare and Kabgayi: German Development Service, Doctors without Borders, and Belgian Cooperation.

Assistance and support also are acknowledged from Chris Barratt and Eric Kagame of the United States Agency for International Development/Rwanda, and from Robert Emrey, USAID/Washington.

Throughout the entire development and implementation process, assistance, contributions and support from the following staff of Abt Associates Inc. and PHR/Rwanda have been highly appreciated: Nancy Pielemeier, Charlotte Leighton, Sara Bennet, A.K. Nandakumar, Miloud Kaddar, Marty Makinen, Daniel Maceira, Phara Georges, and Damascene Butera.

# Executive Summary

## Health Care in Rwanda

Rwanda ranks amongst the poorest countries in the world. Ninety percent of its population of 7.8 million (1998) practices subsistence agriculture and about 70 percent lives below the poverty line. During the humanitarian assistance period that followed the genocide in 1994, primary health care was provided for free in public facilities, which were financed by donors and the government. In 1996 the Ministry of Health (MOH) reintroduced pre-war level user fees in health centers and hospitals. Two years afterwards, in 1998, utilization of primary health care services fell to a worrisome low level of 0.28 consultations per capita per year, raising concerns about the population's financial access to health care and the unused capacities in health centers and hospitals. At the same time, international donors supporting the Rwandan health care sector announced plans to decrease their assistance over the coming years, which obliged the MOH to look for local alternative methods to finance health care in order to ensure the population's access to quality care. Some locally initiated mutual health organizations already existed in Rwanda; however, they differed among themselves organizationally and financially, and were mainly launched in response to specific needs of the population or the health center. Thus, the MOH chose to develop, implement, and test sustainable prepayment schemes in identified areas in Rwanda, which would eventually lead to a nationwide scale up. The MOH wants to achieve the following objectives with the help of schemes: first, improve access to health care; second, strengthen community participation in development and management of prepayment schemes; third, improve quality of health service delivery; and fourth, strengthen financial capacities in health centers to mobilize additional resources.

In preparing, implementing, and evaluating the pilot test, the MOH received technical assistance and financial support from the Partnerships for Health Reform (PHR) project funded by the United States Agency for International Development (USAID) and administered by Abt Associates Inc.

## Organization and Design of Prepayment Schemes

The MOH in collaboration with PHR began the development and implementation of prepayment schemes in early 1999. A seminar held in Bethesda (USA) in February of that year with key MOH representatives provided a framework to develop and implement prepayment schemes in Rwanda. The Directorate of Health Care (*Direction de Soins de Santé*) at the MOH took the responsibility of launching prepayment schemes. A steering committee was formed with representatives from the central and regional levels playing the role of the strategic decision-maker to oversee the development and implementation process. This committee selected three pilot and two control districts in early March. Main selection criteria for the pilot districts were the interest of the population and the authorities in the pilot project and prior experience in prepayment schemes implemention in the districts. From March until June 1999, 12 community meetings were organized in the three pilot districts, during which the MOH in collaboration with community representatives discussed and proposed prepayment schemes' organizational and management features and modalities. During these workshops, two districts, Kabutare and Byumba, chose for their schemes to be co-managed by providers and the population, while the third district, Kabutare, preferred to have the prepayment schemes managed directly by the population. On July 1, 1999, 53 prepayment scheme bureaus, each partnering with a health center, were formed in the three districts and began to sign up members. Each

of the schemes' executive bureaus comprised five elected members. Representatives from each district's prepayment scheme bureaus also elected from among themselves five representatives to create the district federation of prepayment schemes. Community workshops and steering committee meetings produced two documents: the by-laws (*Règlement d'Ordre Intérieur*), which formed the legal basis of the schemes, and the contract between prepayment schemes and providers (*Convention de Collaboration entre la Fédération des Systèmes de Prépaiement et les Formations Sanitaires*).

By paying an annual premium of FRw 2,500 per family, members are entitled—after a one-month waiting period—to a basic health center package that covers all services and drugs provided by their preferred health center, as well as ambulance referral to the district hospital and a limited package at the district hospital. Members pay a co-payment of FRw 100 per episode of care at the health center. Prepayment schemes reimburse health centers by capitation payment. Prepayment schemes forward a 5 to 15 percent of their monthly disbursement fund to their district federation which reimburses the district hospital a per episode payment. Thus, on a health center level, members' risk is shared within the community (catchment area); whereas on a hospital level, members' risk is shared on a district level.

The development and implementation phase of pilot tests was supported by four ongoing interventions. First, health care providers were trained on the effective use of available resources. Second, given that health centers are expected to report an increased demand for drugs due to an increasing membership pool, prepayment schemes were encouraged to give loans to district pharmacies in order to ensure the availability of drugs in the district. Third, prepayment scheme bureau members and health center personnel in the three districts regularly attended training sessions before and after the launch of prepayment schemes. These workshops focused on the scheme modalities, provider payment methods, new accounting tools, scheme administration, organizational and financial issues, information and awareness campaigns, and collaboration with different local authorities. The fourth intervention aims to strengthen financial and organizational management capacities on the provider side in order to help the health centers cope with changes occurring during the launch of the prepayment schemes: first, members prepay for care instead of paying at the time of consumption; and second, prepayment schemes pay a capitation rate instead of a fee-for-service payment.

## Preliminary Results of Prepayment Schemes

The one-year performance of the three prepayment schemes is being measured and evaluated under a quasi-experimental design with qualitative and quantitative data gathered from households, stakeholders and patients, as well as with quantitative monthly routine data from health centers, hospitals, and prepayment scheme bureaus. Routine data are being collected for longitudinal comparison over a period of two years that include pre- and post-launch of prepayment schemes. So far, data have been collected from the year before the launch and from the first six months of scheme operation.

Prepayment schemes are being evaluated on how well they achieve the Ministry's objectives to improve financial access to care, quality of services, community participation, and financial viability of health centers. The fourth goal requires mobilization of additional financial resources to sustain recovery of recurrent costs in health centers. Discussions during the preliminary evaluation workshop in March 2000 provided the MOH with the necessary information base to strengthen the schemes' current implementation phase and to respond to other regions in Rwanda that wish to launch prepayment schemes.

## Enrollment in Prepayment Schemes

During the first six months, more than 50,000 Rwandans, 4.6 percent the population in the three districts, registered with the schemes. Of the 50,000, 31,899 lived in Byumba (7 percent of district population), 7,986 in Kabutare (3 percent of population), and 10,125 in Kabgayi (2.8 percent of population). Registration occurred at an overall steady pace, with some monthly fluctuation caused by subsidization of premiums by employers and religious authorities (which increased new membership) or by competing household expenditures, such as school fees or local taxes (which lowered the rate of new membership).

In addition to other factors, member enrollment depended on prepayment schemes' organizational constraints. During the initial period, every executive prepayment bureau went through organizational changes. General assemblies with all members were organized and new members were elected to represent the scheme in their executive bureaus. Generally, re-elections have strengthened bureaus' organization and have had a positive effect on the schemes' credibility, thus fostering trust among the local population and enhancing membership enrollment.

## Utilization of Health Care

After a one-month waiting period, scheme members become entitled to receive benefits. Overall, health centers reported fewer patients seeking care. While non-members' consultation rates remained at a low level, around 0.2 per capita in all five districts, members visited health centers more often; there were 1.3 new case consultations per member in Byumba, 1.87 in Kabgayi, and up to 1.76 in Kabutare during the first six months. This shows that members' access to care improved and the FRw 100 co-payment did not discourage use of health centers in the pilot districts.

An anomaly was reported in the district of Kabgayi, where the number of female members delivering babies by cesarean section was up to four times higher than in the other two districts.

## Quality of Health Care

Due to the overall declining demand for health care services, district pharmacies did not need to take additional loans to ensure drug availability. Drug prescription in health centers was followed monthly for the one-year period before and during the launch of prepayment schemes. Compared to the year before the launch of the schemes, the value of drug consumption in the three districts increased for non-members, and remained on a similar level for members. Health center personnel reported that prepayment scheme members sought care earlier, needed fewer drugs, and recovered faster than non-members.

In Byumba, health centers improved their quality of services on a structural level by replacing auxiliary personnel heading the health centers with trained nurses. Health centers have been regularly supervised to discuss specific quality of care issues, data collection, and implementation of standard treatment protocols. Improvements in providing quality care are suggested on the spot.

## Resource Mobilization and Cost Recovery

Prepayment schemes show the potential to improve mobilization of local resources for primary health care. While non-members' annual per capita contribution remained at an average level of FRw 150, members' per capita contribution averaged FRw 350, more than twice the non-members' contribution.

The overall decrease in consultations left many health centers with a workload below capacity. As health centers tended to keep their staff and maintain their fixed cost structure, their average fixed costs increased, while their patient revenue declined. Thus, over time health centers generally reported decreasing cost recovery rates for their overall business. Since the launch of prepayment schemes, health centers with above average productivity reported higher cost recovery rates for their members' segment of business compared to fee-for-service paying patients. Generally, the degree to which health centers can improve their cost recovery ratio depends on their productivity and the extent to which prepayment scheme members over-use health care services.

Health center personnel received regular feedback on service utilization, financial standing, and membership status. This helped personnel to recognize the need for data collection, which has subsequently improved, as well as to use information to successfully manage a health care facility.

## Preliminary Conclusions and Next Steps

During a workshop held in Kigali in March 2000, the MOH decided to strengthen the current pilot phase and to identify other areas in Rwanda that wish to implement prepayment schemes.

Strengthening the current pilot phase includes identifying weaknesses, such as the schemes' organizational functioning, awareness campaigns, as well as supporting factors, such as the MOH's political will and local leadership. Recognition of these factors and necessary improvements led to the discussion of next steps.

During the remaining months of the pilot phase, the MOH chose to intensify a prepayment schemes awareness campaign in the three districts by using different media channels (newspaper, radio, TV) and by collaborating with local administrative and religious authorities. At the same time, organizational development of prepayment scheme bureaus was supported by ongoing workshop activities. On a health regional level, a committee will be identified (at the prefecture) and placed in charge of institutionalizing and overseeing prepayment schemes in collaboration with the medical authorities. At this regional level, a permanent secretary will be identified, to act as the scheme's service and connection point to other stakeholders in the district, the region, and the central level.

Evaluation activities will continue based on monthly data collection from health centers, hospitals, and prepayment scheme bureaus. These data will be evaluated in a report describing prepayment scheme impact on providers' utilization, cost, and financial status. Additional survey data will be gathered to evaluate patient satisfaction, stakeholders' perception of prepayment schemes, and households' financial situation and health care seeking behavior. In a final report, this information will be compiled to draw conclusions on the prepayment schemes' socio-economic impact in the three districts.

# 1. Introduction

## 1.1 Objectives of this Report

This report provides qualitative and quantitative information on Rwanda's health care utilization and financing situation prior to and during the development and introduction of prepayment schemes. Specifically, the goal of this report is threefold:

- To evaluate the population's health issues and health care financing strategies under the user fee system prior to the introduction of prepayment schemes.
- To summarize the development and implementation process of alternative health care financing schemes during the year before and six months after the launch of the schemes in three Rwandan health districts, and
- To provide base line information for comparison for follow-up reports on prepayment schemes.

This report is organized in five sections. The first part introduces the overall health care situation in Rwanda after the genocide in 1994. The second part describes the design and implementation of prepayment systems in three pilot districts in 1999. The third part describes the process taken to evaluate the prepayment schemes. Preliminary performance results based on data collected six months after the prepayment schemes' launch are revealed in the fourth part. The fifth part presents preliminary conclusions and leads to the next steps in the schemes' implementation phase.

## 1.2 Overview of Prepayment Scheme Experiment

Two years after the reintroduction of user charges for health care in Rwanda in 1996, utilization of primary health care services reached a worrisome low level of 0.28 consultations per capita. International donors who had supported Rwanda during the humanitarian assistance phase announced plans to withdraw financial support to the health sector. These changes required the Rwandan Ministry of Health (MOH) to look for alternative local methods to finance health care in order to ensure the population's access to quality care. The MOH chose to develop prepayment schemes in three pilot districts and test their impact on the population's access to health care, community participation, quality of health service delivery, and financial capacities in health centers and, to a limited extent, in district hospitals.

A seminar held at the Partnerships for Health Reform (PHR) U.S. office in Bethesda, Maryland, in February 1999 with key representatives of the Rwandan MOH set the framework for the launch of pilot testing of prepayment schemes. The purpose of the schemes is to reduce financial barriers to access to quality health care, while at the same time, to increase the capacity to mobilize resources through community participation.

There are four overall objectives for the design and implementation of prepayment schemes:

1. Improved financial access to health care,

2. Community participation in the development, implementation, and management of prepayment schemes,

3. Improved quality of health service delivery, and

4. Strengthened administrative and financial management capacities in health centers and district hospitals.

Within this framework, the MOH decided to test prepayment systems with the following subscription and management characteristics:

- Compulsory subscription for district population with systems co-managed by community and provider representatives.

- Voluntary subscription for district population with systems co-managed by community and provider representatives.

- Voluntary subscription for district population with autonomous management by community representatives.

During the Bethesda seminar, participants also profiled the schemes' modalities, such as the composition of the benefits package, the co-payment mechanism, and the waiting period. These modalities were later specified during 12 workshop days that involved the strong participation of local community representatives in the three pilot districts.

Due to low utilization for primary health care services, the Ministry of Health chose a prepayment scheme health care package focusing on the coverage of primary health care in health centers and, to a limited extent, on secondary care in district hospitals. The implementation of the systems is supported by four interventions. The first intervention makes effective use of available resources through the systematic application of standardized treatment protocols and aims to improve the efficiency of services delivered by health facilities. The second intervention invests a part of the premium fund accumulated by prepayment schemes in a loan given to the district pharmacy in order to secure the availability of essential medicines dispensed in health centers and district hospitals. Thirdly, efforts are taken to enhance management capabilities among administrators and managers in health centers and hospitals by providing training on the use of financial management tools designed to manage the new health care financing and provider payment mechanisms. Finally, community representatives are elected and trained; these representatives will financially and administratively manage prepayment schemes and ensure their operation and sustainability in the long-run.

The three pilot prepayment systems are being evaluated based on how well they achieve the Ministry's objectives to improve financial access to care, better the quality of services, increase community participation and financial viability of health centers, and achieve sustainability, viability, equity, and efficiency. One instrument being used to evaluate the pilot tests is a household survey, which will provide data for the comparison of changes in demand for health care in the three pilot and the two control districts. Qualitative data will be collected in a focus group survey of members, non-members, providers, and prepayment scheme managers. Additional quantitative data will be collected in a patient exit interview survey, to compare members' and non-members' experience with health

care. Prepayment scheme, health center, and hospital financial and service delivery performance in the five districts continues to be documented and compared using routinely collected data.

In March 1999, the MOH in collaboration with its partners—the United States Agency for International Development (USAID), the World Health Organization (WHO), and the European Union (EU)—institutionalized a steering committee as a strategic decision body, which oversaw the scheme development and implementation process. The committee selected three pilot and two control districts. All three pilot districts have repeatedly asked for the MOH's technical support in developing and implementing prepayment schemes, and have reported some isolated experience with mutual health organizations already present in the district. During the consecutive three months, from April to June, the steering committee supported community meetings in the three districts to develop, set up and implement their schemes. Prepayment scheme bureaus were constituted and organizationally attached to health centers. Prepayment scheme bureau members from each district met to elect five members to serve as representatives on a district level Federation, which acts as a partner to the district hospital.

Bureaus were ready to sign up members on July 1, 1999. Members were eligible to benefit from services after an initial one-month waiting period.

# 2. Health Care in Rwanda

## 2.1 Reasons to Reform Health Care Financing in Rwanda

Almost three-fourths of the Rwandan population falls below poverty line. From 1993 to 1997, Rwanda experienced a sharp rise in poor households, from 53 to 70 percent. This was accompanied by an increase in absolute poverty: those who were poor became even poorer. Thus, the average income of poor households is now further below the poverty line than before the genocide (World Bank, 1998).

After the war in 1994, the MOH set its priorities on the reconstruction of health infrastructure and services and the decentralization of the health sector into districts. From 1994 until 1996, most health centers and hospitals were supported by international organizations and provided health care services free. The MOH introduced user fees in public and mission facilities in 1996. As the international organizations decreased their support, health facilities started to increase their drug and service prices in order to cover a large part of their recurrent cost of providing care. Thus, it is no surprise that a population with an increasing number of poor people consumed fewer health services. This decrease in utilization caused declining revenues for health centers and comparatively lower cost recovery rates over time. The MOH addressed new cost recovery strategies for health care services by launching prepayment schemes in three pilot districts, each with a target population of 1 million inhabitants. The schemes focus on improving equity in access to quality health care for the rural population, and setting incentives to health care providers to improve quality and efficiency in service delivery.

### 2.1.1 A Recuperating Economy

Before the war, Rwanda reported an annual population growth rate of 3 percent and a stagnating economy. Rwanda's population growth rate peaked in 1997 due to the return of about 2 million Rwandans from neighboring countries, which resulted in an overall population of approximately 7.8 million people. Fertility rates are still high in Rwanda with an average number of 6.5 children born alive to a woman during her lifetime. This contributes to a rapid growth of the population (annual population growth projections are 2.8 percent for 1997–2002) and an age structure dominated by younger people (half of the population is less than 20 years old) (Ministry of Finance [MOF], 1998a).

In 1998, the per capita gross domestic product (GDP) was $252, well below 1990 GDP rate of $270. The GDP growth rate was 9.6 percent in 1998, and is projected to slow to 6.8 percent from 1999 to 2003 (World Bank, 1999a). Since 1994, Rwanda's economy has been recuperating, mainly due to external resource inflow, and less to the recovery of the productive capacity, especially export. Rwanda's external and domestic debt rose rapidly from just under $400 million in 1985 to about $1 billion in 1996, and to $1.4 billion in total debt stocks (including arrears) by the end of 1998, equivalent to 72 percent of GDP. In 1998, the Rwandan government spent on a per capita basis $6.80 on debt service and $0.80 on health. Rwanda's debt burden is unsustainable. Although most of Rwanda's debt is concessional at an average interest rate of about 1 percent on official loans, the net present value of external debt in 1997 was 557 percent of exports and the stocks of external debt was 606 percent of government revenue (World Bank, 1999b).

Approximately 90 percent of the population is active in agriculture, the most labor intensive and least productive sector, which produces about one-third (37 percent) of the country's GDP. Coffee and tea remain the principal export crops; however, most agricultural production is still subsistence agriculture, produced primarily for household or community consumption. Industry and manufacturing constitute about 23 percent of the GDP and employ 2 percent of the population, whereas 7 percent of the labor force works in the service sector producing 43 percent of GDP in 1998.

Before the war, in 1985, Rwanda's income distribution was measured by a Gini coefficient[1] of 0.27, revealing a more equal income distribution than that of other sub-Saharan countries. Fifteen years later, the population's income distribution can be expected to be less equal, given the poverty report findings (World Bank, 1998) and the fact that the large majority of the population still works in the least productive agriculture sector.

### 2.1.2 The Economic Impact on Health

Worldwide, there is a strong direct relationship between health spending and GDP per capita. As a country's income increases, it spends a larger share of GDP on health, and public health spending increases. The World Bank estimated this global income elasticity of per capita public health spending relative to per capita GDP to be 1.21, which means that a 10 percent increase in the per capita GDP is associated with a 12.1 percent increase in public health spending.

Table 1 presents per capita health spending, health spending-to-GDP ratio, and the public share of total health spending for the sub-Saharan region, low-income countries[2] and Rwanda. Compared to Rwanda, the sub-Saharan region reports a GDP that is twice as high and a total health spending that is four times the amount spent in Rwanda. Government contributions to health in sub-Saharan regions are six times as high (54 percent) as in Rwanda, where they have remained on a low level (9 percent) after the war despite a growing GDP. From 1996 to 1997 Rwanda reported a 10 percent GDP growth rate and a decline of 8 percent in public health spending. Although, the Rwandan government increased total recurrent expenditure by 24.7 percent from 1997 to 1998, public health spending[3] as a share of total government expenditures remained on a low level of 2.2 percent. This proportion is considerably lower than in comparable countries such as Tanzania (12 percent) or Zambia (12 percent). In 1998, the Rwandan government spent $0.8 per capita on health care for its citizens. This amount falls short of the pre-war public recurrent expenditure target of $4.5 on health care.

**Table 1. Health Spending in Rwanda compared with sub-Saharan Region and Low-income Countries (Country-Weighted Averages)**

| Region/ Country | Per capita GDP | Total health spending in US$ per capita | Public health spending in US$ per capita | Public share as percent of total health spending | Health spending as percent of GDP |
|---|---|---|---|---|---|
| Sub-Saharan Africa (97) | $500 | $38 | $20.5 | 54% | 4.0% |
| Low income econonies (97) | $350 | $16 | $7.5 | 47% | 4.3% |
| Rwanda (1998) | $252 | $9 | $0.8 (NHA) | 9% (NHA) | 2.8% |

*Source*: MOF 1998, World Health Organization 1999, PHR/Rwanda 1998.

[1] A Gini coefficient of 1 represents absolute inequality and 0 represents absolute equality in the distribution of total income between households.
[2] Income groups are based on 1994 GDP per capita data. Low income: $725 or below. Source: World Bank Health, Nutrition, and Population database.
[3] From FRw 2,274 million to 2,715, million FRw. Source: Health Research for Action (HERA) 1999.

External assistance for health care continues to be a significant revenue source in low-income countries such as Rwanda, where it finances about 64 percent of the health sector operational and investment costs. In 1998, households financed about 27 percent of total health care, leaving an estimated 9 percent to the Rwandan government (PHR/Rwanda, 1998).

Health care in Rwanda is relatively expensive compared to other goods. In 1997, the medical consumer price index (CPI) scored 30 percent above the general CPI in Rwanda. From 1997 to 1998, the general CPI increased 3.7 percent and the medical component, already high, increased slightly more (5 percent).

These findings about health care financing and prices raise concerns about equity in access to health care for a large part of the population. If donors were to further withdraw support from the health sector, the government and households would have to increase their present shares. This would place a heavy burden on poorer households and increase the risk of exclusion from health services. Options for risk sharing through formal insurance schemes are extremely limited in Rwanda as a result of the small size of the formal employment sector, the limited financial savings of the sectors, and the weak institutional environment to support such schemes. Thus, poorer Rwandan households rely on informal arrangements, such as extended families, rural cooperatives, or non-governmental organizations, to provide financial support in the case of illness.

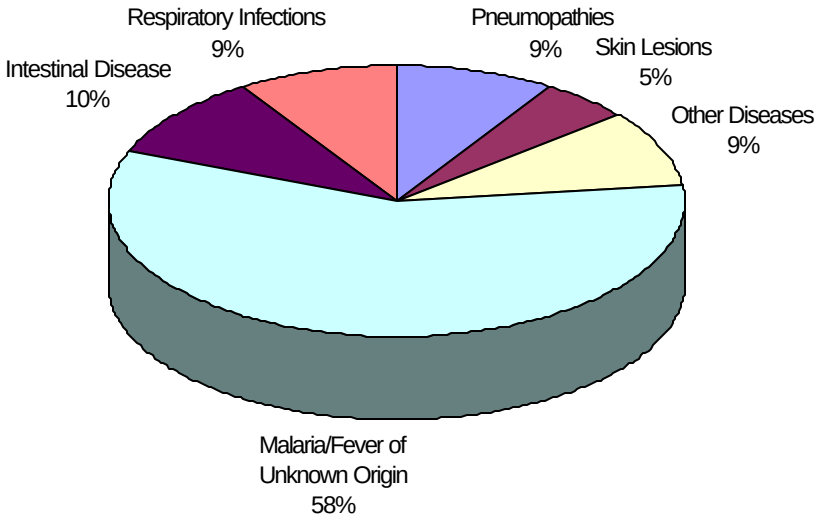
Poor prospects of government health funding and heavy reliance on external funding heighten the challenge of achieving financial sustainability in the Rwandan health sector. This challenge of limited resources has to be faced in an environment where access to health services is low and health status poor.

### 2.1.3 A Population with Poor Health Status

Communicable diseases dominate Rwanda's burden of sickness and suffering, pointing to a debilitating excess burden among the poor. The 1998 annual report of the MOH reports that, for health centers, the majority (88 percent) of health encounters—about 2 million patient contacts—suffered of one of the five most frequent diagnoses including malaria, fever, intestinal diseases, respiratory infections, pneumonia, and skin lesions (Figure 1). During the same year, health center data revealed that almost half (43 percent) of the Rwandan boys and girls under five years were suffering from nutritional stunting (Republic of Rwanda, 1998b).

In 1998, Rwanda's health information system (*Système d'Information Sanitaire*, SIS) reported that every fourth citizen went for a primary care consultation at a health center (0.28 consultations per capita). Hence, patients either sought care in the traditional sector or from private pharmacies, or, as the following health outcome indicators indicate, patients generally faced constraints in accessing quality health care.

**Figure 1. Burden of Disease in Health Centers in 1998**




Source: MOH, 1998

The combined effect of the socio-economic situation, low consultation rates, and the high prevalence of malaria, diarrhea, and respiratory infections result in a high rate of childhood malnutrition and an increase in the child mortality rate. Rwandans are most likely to die from preventable diseases and infections such as malaria/fever, diarrhea, respiratory infections, and AIDS. Table 2 shows higher mortality for mothers, children under five and infants in Rwanda in 1997 compared to 1991, as well as compared to other sub-Saharan and low-income countries in 1997.

**Table 2. Health Outcome Indicators in Rwanda compared with sub-Saharan Region and Low-income Countries, 1997**

| Region/Country | Maternal Mortality Ratio per 100,000 | Mortality Rate under Age 5 per 1,000 | Infant Mortality Rate under Age 1 per 1,000 | Estimated HIV Prevalence | Life Expectancy in Years |
|---|---|---|---|---|---|
| Sub-Saharan Africa | 430 | 161 | 91 | 9% | 49 |
| Low-income countries | 308 | 100 | 80 | 5% | 61 |
| Rwanda | 810 | 203 | 130 | 11% | 48.5 |
| Rwanda (1991) | 300 (1988) | 150 | 84 | n/a | 46 |

*Source*: MOF, 1998; World Bank, 1993, World Health Organization, 1999, National Population Office 1994

Combining Rwanda's burden of disease, high level of malnutrition, low primary care utilization and high mortality rate with the country's overall socio-economic situation produce a bleak prospect for the rural population's health-related quality of life. This situation places a particularly heavy burden on women. Of the Rwandan population, 53.7 percent are female. Rwandan women carry a heavy economic responsibility by heading one-third of the households. Rwandan women spend more time in pregnancy and child rearing (6.2 fertility rate) compared to women in other low-income countries (3.4 fertility rate) (MOF, 1998). Their life is less healthy and shorter due to higher exposure to infections than their counterparts in other low-income countries.

So far, this chapter has discussed the reasons for health care financing reform in Rwanda, namely Rwanda's poor macroeconomic situation that has had a negative impact on health financing, which in turn has increased the financial barriers to accessing health services, consequently leading to

poor health in Rwanda. Health care financing reform, which improves access to quality health care, can lead to better health and declining mortality rates. There are good reasons to believe that this relation is causal in both directions; thus better health due to better access to health care positively affects income potential, which contributes to Rwanda's macroeconomic recovery. Knowing that suffering and sickness trap people in poverty, sustained investment in improving access to quality care for the poor could, in the longer term, contribute to the alleviation of persistent poverty in Rwanda.

## 2.2 The Provision of Health Care

Rwanda is divided into 11 health regions and further into 40 health districts. A district is divided into several communes, and each commune has approximately eight sectors, each containing about seven cells. A cell comprises about 100 households.

In 1998, Rwanda had three public referral hospitals, including one university hospital in Butare, the Central Hospital in Kigali and one mental health care hospital. Overall 30 district hospitals (18 public and 12 mission hospitals) were operational. District hospitals cover on average a catchment area of 217,000 inhabitants. District hospitals report on average 180 beds and are staffed with 46 qualified persons and equipped to provide secondary health care. Hospitals' occupancy rate strongly depends on their ownership, with 48 percent in public and more than 100 percent in mission hospitals (due to children sharing beds). Hospital patients' average length of stay is seven days. There are about 340 health centers in Rwanda, each covering an average catchment area of 23,000 people, which corresponds to the average population size of a commune. Health centers provide primary care mainly in rural areas, and are generally staffed by one or two nurses supported by medical assistants. Among the staff there are on average about three government employees, and the rest are non-governmental employees who are paid out of health center revenue.

Rwanda's private health sector is still small consisting of one tertiary care hospital in Kigali. As of 1998, there were 14 private physician practices or clinics that were located mainly in Kigali.

Although the MOH encourages the population to seek care in health centers, it is estimated that an important portion of the rural population seeks care with traditional healers before or instead of going to a health center. Traditional healers allow patients to pay in kind, responding to the irregular cash availability in rural households.

The Center for the Purchase of Essential Drugs for *Rwanda (Centrale d'Achat des Médicaments Essentials au Rwanda*, CAMERWA) is the national drug importer and sells essential drugs to health facilities in Rwanda's public and mission health sector. CAMERWA started its activities in 1998 with the support of the World Bank Health and Population Project. There are several private pharmacies in Rwanda, among them five main importers. Overall, Rwanda's public and private sector imported drugs valued at $22.4 million. Of this amount, 45 percent was imported by international organizations for distribution in the public sector, 32 percent by the private sector, and 23 percent by CAMERWA/World Bank. An unknown part of private sector imports was sold to international organizations in the country for distribution in the public sector (Republic of Rwanda, 1999).

As in other low-income economies, Rwanda faces constraints in finding qualified personnel to cope with an expanding health sector and a growing population. This situation of limited resources is challenging the efficient use of the qualified staff available to improve the quality and effectiveness of care. The 1998 annual report of the MOH counted 123 physicians and 1,566 qualified personnel working in Rwanda's health districts. Table 3 shows that one qualified staff person was available to

provide care to 4,981 inhabitants in 1998. Given Rwanda's low per capita consultation rate of 0.28 in health centers in 1998, a qualified staff person takes care of five patients per day. Thus, Table 3 reveals for 1998 that on average district health centers do have free qualified personnel capacity. This free capacity became even more apparent with consultation rates continuing to drop in 1999 and health centers maintaining their personnel structure.

**Table 3. Health Care Infrastructure and Human Resources in Rwanda 1998**

| Country | Population per health center | Population per physician | Population per qualified personnel | Consultation rate per work day per qualified staff person* |
|---|---|---|---|---|
| Rwanda 1998 | 23,000 | 63,414 | 4,981 | 5.4 consult/staff/day |
| Rwanda 1991 | N/A | 71,426 | 4,105 | N/A |

*Source*: MOH, 1999

* If the consultation rate is 0.28 per capita: 4,981 population per staff x 0.28 = 1,395 consultations per staff per year. Calculated using 266 workdays, a qualified staff person provided 5.2 consultations per day in 1998.

## 2.3 Cost Recovery Reforms

Patients have paid for health care in Rwanda since 1975 (Shepard et al., 1992). Only during the post-war period (1994/1995) was health care largely provided free with the support of humanitarian organizations. Health Research for Action (HERA) reports that patients paid on average FRw 514 ($1.6) per visit in public and FRw 465 ($1.45) in mission health centers during 1998. Thus, private households' annual health expenditures in health centers are estimated at $0.6 per capita. In 1986, Shepard calculated households' out-of-pocket per capita health expenditure for all public and private health services, and found that per capita spending for health was more or less $2 per year, or an average 2.4 percent of 1986 household income.

A few people were exempted from fees, namely persons certified as indigent by their commune and the health center's health committee, along with civil servants and soldiers. Health centers' income loss caused by non-paid care reflected about 5 percent of total revenue from patients. There are several different cost recovery systems in place throughout the country ranging from revolving drug funds to user fees for services and different forms of health solidarity funds, which most of the time grew spontaneously responding to specific needs of the local population.

### 2.3.1 Bamako Initiative

The earliest implementation of the Bamako Initiative pertained to user charges for essential drugs channeled through a revolving drug fund managed at community level (McPake et al., 1993). Within a broader cost recovery program, Rwanda implemented the Bamako Initiative in 124 of 166 health centers in 1989. The objective was threefold: first, to improve the organization of the public health system; second, to reinforce financial and administrative capacities; and third, to recover cost of essential drugs.

In 1998, health centers and hospitals began to separate their pharmaceutical revenue from other revenue by keeping two bank accounts. On June 30, 1999, health centers had accumulated an increasing drug revolving fund, and reported drug assets from patient receipts in the overall amount of FRw 158 million ($493,709) of which 88 percent was held on their bank accounts and 12 percent in cash (SIS). This value excludes pharmaceutical stock in health centers and hospitals, which is currently not documented with valid data. Health centers and hospitals are expected to invest this

fund in buying drugs with CAMERWA and Bufmar. In case of drug shortages at district pharmacies, health centers are supposed to buy limited quantities of drugs at higher prices from private importers to respond to patients' drug needs. However, it is estimated that international organizations and the government of Rwanda covered about 80 percent of health centers' drug needs during 1997.

In 1998, HERA documented a level of self-financing for drugs of 74 percent in mission and 40 percent in public health centers. Public health centers reported an average revenue for drugs per curative consultation of FRw 97 ($0.29). The amount paid by patients was nearly twice as high in mission health centers with FRw 180 ($0.54) per curative consultation (HERA, 1999a).

### 2.3.2 User Fees

In 1996, public and mission health care facilities started to reintroduce user fees for curative outpatient and inpatient care. Generally, providers in health centers and hospitals either set their prices based on what they assume the population is willing to pay, or in response to prices set by other providers, or they simply reinstall a pre-war price level. An increasing number of health centers require a payment for preventive care services nearly equivalent to the charge for curative care, although preventive care is subsidized by the public sector and the donors, and should be largely free of charge to patients.

Providers' individualized price setting practice in Rwanda resulted in disincentives for patients to seek care first at the primary level, or to go to the district hospital rather than the national referral hospital. For example, due to the four different price categories at the tertiary-level national referral hospital in Kigali an overnight stay there is less expensive for the poor compared to the secondary-level district hospital in Rwamagana, which is 50 km from Kigali.

Many health centers and hospitals post their price list for drugs and services at the cashier's office where patients pay for services. The going fee for an outpatient consultation in public and mission health centers is FRw 100 ($0.31), while a district hospital overnight stay in a shared room ranges between FRw 100 to 500 ($0.31–$1.56). Specifically mission health centers accomplished relatively high degrees of self-financing (65 percent), whereas public health centers recovered 37 percent of their operational costs by charging user fees (HERA, 1999b). Although health facilities' revenue is earmarked for reinvestment in financing of quality health services, investment in health centers and hospitals are to a great extent still financed by international organizations. Health centers use receipts from patients to cover part of their fixed and variable costs and if possible establish bank accounts. During the last couple of years, health centers have accumulated resources that could be increasingly invested to assure sustainable quality care.

Payment made at the time health care is received impacts relatively more on poorer households, which spend a much higher proportion of their income on health care than the well-to-do, and raises concerns about equal access to care. As patients are generally willing to pay for quality care, alternative payment methods for health care should be explored which do not deter the population from using services.

### 2.3.3 Emergence of Mutual Health Organizations

People in Rwanda have started informal ways to pay for care in advance in order to protect themselves against financial risks at the time health care service is needed. The district of Byumba reported two mission health centers with prepayment experience: Bungwe launched a mutual health

organization (*mutuelle)* to finance ambulance costs in case of a hospital transfer. Participating households paid a premium of FRw 500 ($1.56) per year. After two years, the ambulance mutuelle counted 2,500 households (approximately 13,000 people) and an accumulated premium fund of FRw 1.5 million ($4,687). Rushaki's mutuelle covered services at the health center. Rushaki regularly recollected FRw 1,000 ($3.12) premium per household when members' total premium fund was used. The mission health center of Gisagara in the district of Kabutare had a mutuelle covering services at the center. The mission health center of Mushaka in Cyangugu has two mutuelles: the first covers services during pregnancy including ambulance referral but excluding delivery. Pregnant women sign up for nine months and pay per pregnancy a premium of FRw 500. The second mutuelle covers health care services for indigents or poor people at the center. The monthly premium is FRw 100 per poor household covering up to three persons. Other mutuelles were reported in the regions of Butare, Ruhengeri, Kigali, etc. Most of them cover drugs, health center services or ambulance transport and to a limited extent district hospital services. Most of these mutuelles were initiated and managed by mission health care providers to generate revenue to cover their operating costs. However, the current data collection does not allow for any conclusion on the financial and administrative sustainability of these different mutual health organizations, as well as their impact on cost-recovery in health centers and patients' access to care.

Since January 1999, government employees have been required to contribute 5 percent of their monthly salary to a government mutuelle. Public employees were supposed to receive care in public and mission facilities since September 1999 by paying a 20 percent co-payment. However, as of March 2000 providers had not yet been reimbursed for treating government employees.

## 2.4 Conclusion on Health Care in Rwanda

Despite the economic progress achieved since the genocide in 1994, Rwanda's social indicators present a dismal picture. The Rwandan government has been a major provider of health services that have been challenged by financial constraints, limited service quality, and a population with an unchanged or actually worsening health status. International organizations and religious non-governmental organizations have been important partners in providing and financing health care services. Private households contribute to health care financing through user fees, a practice which negatively affects access to health care for the majority of the population. The Rwandan National Health Policy of 1995 aims to address this issue by supporting the role of households and communities in funding of health services. The population could use community-based health funds to signal their preferences and thereby improve access and quality of care. Lessons learned from the community-based pilot experiment of prepayment schemes will provide the MOH with an institutional instrument to move from emerging mutual health organizations towards a deliberate health financing strategy, aimed at improving resource management and the quality of health services for the majority of the population.

# 3. Design of the Pilot Tests

## 3.1 Preparatory Activities

Rwanda's National Health Policy of 1995 laid the groundwork for development and implementation of community-based health financing schemes. The policy anticipates a negative impact on access to health care once user fees are introduced and increased. To achieve its strategic objective, the USAID health program aims to support the MOH objective to improve access to care by transforming health financing systems, emphasizing quality of care, and empowering local communities. The MOH and USAID objectives led to the pilot-test of alternative health care financing mechanisms in three health districts in Rwanda. After one year, experience with prepayment schemes should provide the MOH with the necessary information to decide on an eventual extension into other areas in Rwanda. During the six-month preparatory phase, a steering committee was constituted at the MOH, and existing local prepayment scheme activities were assessed, as well as providers' and the population's interest in prepayment schemes. The steering committee selected three pilot districts and two control districts, and developed and implemented prepayment scheme models in the three districts, in collaboration with local community representatives.

### 3.1.1 Technical Preparation

The technical preparation for pilot testing prepayment schemes started during a workshop held in the PHR office in Bethesda, Maryland, in February 1999. Participants discussed several examples of cost recovery in West African countries, and, based on these experiences, they focused on the alternatives to be developed and implemented for the Rwandan pilot test. It was of importance to build at the local level, with community participation and prepayment schemes that are sustainable, viable, efficient, and equitable.

Rwanda's experience with cost recovery with the existing "cash payment at time of consumption" procedure was evaluated in HERA's analysis on health care financing in Rwanda. HERA's utilization, cost and financial findings were combined with data collected in health centers and reported in the MOH health information system, SIS, to prepare the launch of prepayment schemes and calculate premiums. Tables 4 and 5 show annual probability and fee-for-service rates to calculate base scenario premiums on a health center and on a hospital level. Consultation fees will be covered by patients' co-payment of FRw 100.

Tables 4 and 5 show that full coverage at health centers costs FRw 366 per capita and hospital coverage excluding drug expenditure costs of FRw 44 per capita, which combined results in the premium base line amount of FRw 410 (see Table 6). It was assumed that per capita consultation rates at health centers would increase by 25 percent compared to baseline utilization in the three districts. The prepayment schemes' administrative costs and reserve fund were calculated at 5 percent of premium.

**Table 4. Price and Probability of Health Center Care**

| Health Center Services | Annual Probability (a) | Health center fee per service (b) | Avg. Price paid per person (a) x (b) |
|---|---|---|---|
| Laboratory | 0.0501 | FRw 100 | FRw 5 |
| Small surgical intervention | 0.0501 | FRw 100 | FRw 5 |
| Delivery | 0.0071 | FRw 500 | FRw 4 |
| Health center admission | 0.0501 | FRw 500 | FRw 25 |
| Ambulance transport | 0.0071 | FRw 5,000 | FRw 36 |
| Average drug value per patient | | FRw 400 | FRw 291 |
| Annual Total per Person | 0.7276 | | FRw 366 |

**Table 5. Price and Probability of District Hospital Care**

| Hospital Services | Annual Probability (a) | Hospital fee per service (b) | Avg. Price paid per person (a) x (b) |
|---|---|---|---|
| Consultation | 0.0679 | FRw 200 | FRw 14 |
| Laboratory | 0.0166 | FRw 400 | FRw 7 |
| Radiology | 0.0029 | FRw 1000 | FRw 3 |
| Surgical intervention | 0.0017 | FRw 1500 | FRw 3 |
| Delivery | 0.0018 | FRw 1000 | FRw 2 |
| Hospital admission | 0.0101 | FRw 1500 | FRw 15 |
| Annual Total per Person | 0.101 | | FRw 44 |

Table 6 presents a premium resulting in FRw 538 per person calculated at current user fees. An average family premium was set at FRw 2,500 for families with up to seven members. A more expensive premium of FRw 2,000 was set for persons signing up as individuals; it was assumed that they would make up 5 percent of all members. Due to health centers' economies of scale, providers are expected to report decreasing average fixed costs and increasing profits due to a growing membership pool, which in turn should motivate providers to support membership enrollment.

**Table 6. Premium Calculation**

| Charge | Price |
|---|---|
| Total 1: Premium base health center (Table 5) and hospital (Table 6) | FRw 410 |
| Scenario + utilization increase 25% of Total 1 | + FRw 102 |
| Total 2: Premium scenario | FRw 512 |
| + administrative cost prepayment scheme 5% of Total 2 | + FRw 26 |
| Total premium per person based on user fee charges | FRw 538 |

In August 1999, a focus group survey of 12 groups was conducted in the three pilot districts to document the population's socio-economic situation, health care access pattern, and attitude towards solidarity financing systems such as mutual health organizations. These evaluations confirmed initial worries about equity of access to health care. Also, in the focus group survey the population voiced their concerns about financial access to care and quality of care, and their strong interest in participating in trustworthy mutual health organizations. Focus group participants acknowledged their lack of experience in organizing themselves in associations or other mutual help organizations (National Population Office [*Office National de la Population*, ONAPO], 1999).

The modalities of the pilot tests were discussed and designed in collaboration with community representatives during several days of workshops in the three pilot districts. In addition, an awareness and sensitization campaign was launched in collaboration with local political and church authorities to inform the rural population during community meetings about the schemes and their modalities. A test phase of one year is too short to draw conclusions about the impact of prepayment schemes on the population's health status and health outcome. However, it can be expected that improved access to quality care will improve the overall health status of a population over time.

### 3.1.2 Prepayment Scheme Development

#### 3.1.2.1 Selection of Districts

The pilot committee selected the three largest of Rwanda's 40 health districts to test prepayment schemes, namely Kabutare, Byumba, and Kabgayi. Two additional districts, Bugesera and Kibungo, were selected as control districts. In general, the socio-economic situation in rural Rwanda is dominated by subsistence agriculture, with relatively few farmers organized in agricultural cooperatives. Socio-economic and health sector indicators were considered when selecting the districts. During the 1990s, there was no household survey conducted in Rwanda to report on household income, assets, and spending behavior. Thus, due to the limited data availability on a district level, the pilot committee decided to select those districts which responded best to the following five qualitative criteria:

- A district administration's interest and willingness to collaborate
- Districts that have already approached the MOH for technical support of prepayment schemes
- Dynamic district management teams
- A district with enough health infrastructure such as district hospital and health centers
- A district that has not participated in too many pilot projects with international organizations

According to the pilot committee, the three districts selected mirror Rwanda's overall characteristics very well. Thus, if the pilot succeeds in these districts, it would be possible to replicate the schemes nationwide. Table 7 presents the district characteristics for population and health centers. Health centers in the five districts cover catchment areas of different sizes and on average serve a population between 11,000 and 23,000 inhabitants.

**Table 7. Health Centers in Pilot and Control Districts in 1998**

| Indicators | Byumba | Kabgayi | Kabutare | Bugasera | Kibungo | Rwanda |
|---|---|---|---|---|---|---|
| District population | 429,367 | 368,020 | 262,160 | 262,465 | 265,313 | 8,131,242 |
| Average population per health center | 22,966 | 21,648 | 16,385 | 18,748 | 11,181 | 23,501 |
| Number of health centers | 20 | 17 | 16 | 14 | 11 | 346 |
| Health center consult/ population | 0.5 | 0.5 | 0.7 | 0.6 | 0.3 | 0.28 |

*Source*: SIS Rwanda

Table 8 shows some indicators for hospitals in the five districts and in Rwanda overall. Each of the five districts has a district hospital. The hospitals generally report very low occupancy rates. With an increased population density, a higher occupancy rate can be expected; however, this is not the case in the five districts. Hospital deliveries are usually complicated deliveries since the majority of women deliver babies at home or at a health center. While few Rwandan mothers deliver their babies by cesarean section, cesarean sections range between 34 percent and 41 percent of all hospital deliveries in the selected districts due to the fact that most hospital deliveries are complicated.

**Table 8. District Hospitals in Pilot and Control Districts in 1998**

| Indicators | Byumba | Kabgayi | Kabutare | Bugasera | Kibungo | Rwanda |
|---|---|---|---|---|---|---|
| Population | 429,367 | 368,020 | 262,160 | 262,465 | 265,313 | 8,131,242 |
| Physicians/100,000 | 0.9 | 1.3 | 2.7 | 0.4 | 5.3 | 1.4 |
| Pop per inpatient bed | 3,091 | 1,349 | 1,663 | 3,645 | 1,301 | n/a |
| Occupancy rate | 49% | 29% | 67% | 9% | n/a | n/a |
| Average length of stay | 6 | 7 | 7 | 3 | 5 | n/a |
| Number of cesarean sections | 209 | 406 | 212 | 47 | 113 | n/a |
| Cesarean section as % of all hospital deliveries | 41% | 34% | 34% | n/a | 41% | n/a |

*Source*: Hospital data

International humanitarian and development aid organizations are assisting health regions, districts and providers throughout Rwanda by financing about 64 percent of overall care in Rwanda. Table 9 lists the international organizations supporting the five health districts. Their activities include technical support to the district administration and hospital as well as financial and drug support to the districts.

**Table 9. International Organizations Supporting Health Care in Rwanda**

| | Byumba | Kabgayi | Kabutare | Bugasera | Kibungo |
|---|---|---|---|---|---|
| International Donors | DED* | Belgian Cooperation | MSF,* Healthnet | WHO, ZOA* | China, EU, UNICEF |

* DED = *Deutscher Entwicklungsdienst* (German Development Service), MSF = Médecins sans Frontiere (Doctors without Borders), ZOA is a Dutch non-governmental organization.

#### 3.1.2.2 Community Participation in Elaboration of Prepayment Schemes

Community participation is one of the MOH's eight strategies for achieving the overall objective of promoting the population's health by providing continuous, integrated, and comprehensive health care. The National Health Policy of 1995 encourages the population to develop solidarity mechanisms, such as mutual aid societies and health insurance schemes in view of the need to recover costs (Republic of Rwanda and WHO, 1995).

During the four months between the Bethesda workshop in February 1999, and the implementation of prepayment schemes on July 1, two to three workshop days were organized in each of the three pilot districts. Participants in these meetings discussed prepayment scheme organizational issues and modalities for their local level and elected community representatives to constitute their prepayment scheme bureaus. The discussion base for these workshops was an information brief describing the basic features for each of the modalities of prepayment schemes. People from all over the districts participated in these workshops, reflecting a strong popular interest

in this solidarity process as well as a concern about access to care. Suggestions of these district meetings were forwarded to the central steering committee headed by the MOH Director of Health Care. In its strategic role, the committee discussed the districts' proposals and made decisions about prepayment scheme management, organizational structure, and modalities in the districts. Committee decisions were fed back to the district meetings, discussed, and, if agreed upon, implemented.

During several sensitization and awareness campaigns with local authorities starting in late May 1999, the population was informed about the introduction of prepayment schemes in their communities. Radio spots, newspaper articles, and community and church meetings were used in this information campaign.

## 3.2 Design of Prepayment Schemes

The final design of prepayment schemes is a result of discussions held during the district workshops, community gatherings, and central steering committee meetings. One year after prepayment schemes were launched, the pilot project evaluation data has provided information to the MOH indicating which of the three schemes will perform best in improving financial access to care, improving quality of care, strengthening community participation, and strengthening management capacity, given their differences in management, enrollment, and hospital package.

### 3.2.1 Benefit Package

The three districts chose the same benefit package on a health center level, with all services covered, including drugs on the essential drug list and ambulance transport to the district hospital (Table 10). The hospital package at the district hospital of Kabgayi is more comprehensive, with cesarean sections, non-surgical pediatric, and malaria cases. The hospitals in Kabutare and Byumba chose to include overnight stays, physician consultations, and cesarean sections in the benefit package. Health centers play a preferred provider and gatekeeper function, requiring members to sign up with the prepayment scheme bureau partnering with their preferred center. In case of sickness, members first contact their identified health center. Only with a referral from the health center are any hospital services covered by the scheme. Therefore, risk pooling for the health center package takes place on the level of a health center's catchment area, whereas the hospital risk is pooled on a district level.

**Table 10. Health Center and Hospital Benefit Package**

| Package | Kabutare | Byumba | Kabgayi |
|---|---|---|---|
| Health Center | At health center of first contact:<br>Preventive and basic curative care provided by nurses in health center<br>Drugs on essential drug list<br>Hospitalization at health center<br>Ambulance transfer to district hospital | Same as Kabutare | Same as Kabutare |
| District Hospital | Covered with health center referral:<br>Consultation with physician<br>Overnight stay per night<br>Cesarean Section | Same as Kabutare | Covered with health center referral, treatment of 3 diagnoses (everything covered) per episode:<br>Cesarean-Section<br>Pediatric cases (<5 years)<br>Malaria (>5 years) |

### 3.2.2 Financing Mechanisms

During district meetings, district representatives voted between compulsory or voluntary subscription for district inhabitants. The 150 representatives who participated at the constitutive meeting in Kabgayi voted unanimously for compulsory subscription, which corresponds to a district health tax. However, Rwanda does not have a legal base to collect a health tax. The time frame was too short to pass a law at the National Assembly to introduce a legal framework. Therefore, Kabgayi decided to call its subscription the "health solidarity fund" with the intention of intensifing the sensitization campaign announcing that enrollment was compulsory. Kabgayi chose a more comprehensive hospital package, which would allow testing for an alternative variable in case the district population did not perceive the "health solidarity fund" message as compulsory.

Membership categories are the same in the three districts, namely individual, family, or group subscription. Due to the more comprehensive hospital package, Kabgayi's annual premium is slightly more expensive (FRw 2,600 per family) compared to Kabutare and Byumba (FRw 2,500). By joining the prepayment system, members pay the annual premium and receive their membership card, which entitles them to the one-year benefit package—after an initial one-month waiting period. Printed on the back of membership cards are six preventive care messages encouraging members to vaccinate their children, pregnant women to have three prenatal care visits, and so forth. Members pay a co-payment of FRw 100 for each curative visit at the health center.

**Table 11. Prepayment Scheme Modalities in the Three Pilot Districts**

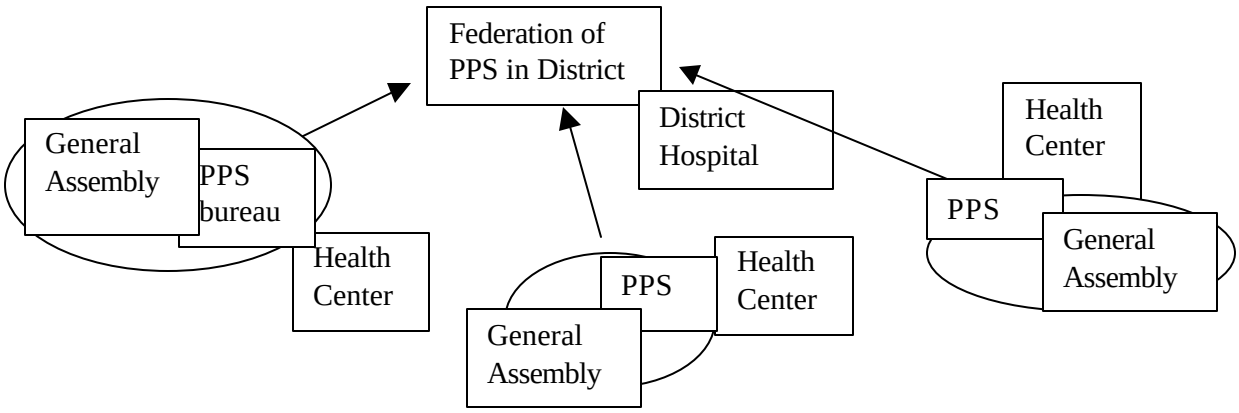
| Modalities | Kabutare | Byumba | Kabgayi |
|---|---|---|---|
| Subscription | Voluntary | Voluntary | Health Solidarity Fund |
| Membership categories and annual premium | Individual: FRw 2,000<br>Household: FRw 2,500 up to 7 people; if 8+ persons: FRw 530 for each additional person<br>Groups (with 8+ people): FRw 530 per person | Same as Kabutare | Individual: FRw 2,200.<br>Household: FRw 2,600 up to 7 people; if 8+ persons: FRw 550 for each additional person<br>Groups (with 8+ people): FRw 550 per person |
| Waiting period | One month after subscription | Same as Kabutare | Same as Kabutare |
| Co-payment in health center | FRw 100 per member per curative visit at health center | Same as Kabutare | Same as Kabutare |
| Health center contact and referral | Health center is preferred provider and gate-keeper.<br>Hospital package is covered with health center referral | Same as Kabutare | Same as Kabutare |
| Management | Autonomous | Co-Management | Co-Management |

Workshop participants in each of the three districts decided if the team managing their system should be composed of community representatives only and be autonomously managed or co-managed by representatives of the population and health care providers. Prepayment schemes were constituted and implemented on July 1, 1999, and members started to sign up with the prepayment scheme bureau that was attached to the health center they usually visited.

### 3.2.3 Organization of Prepayment Schemes

In April 1999, Rwanda went through its first fair direct democratic election process on the lowest administrative level (cells and sectors). People elected community representatives in charge of health, gender, and social issues. Workshop participants decided that prepayment schemes should be managed close to the population and that members should know the persons heading their prepayment scheme bureau and managing their premium fund. Therefore, each health center has a partnering prepayment scheme bureau, which totals 20 bureaus in Byumba, 16 in Kabutare and 17 in Kabgayi. During the development phase through the end of June, bureau members were chosen among the newly elected representatives from sectors and cells in the three districts. Each bureau comprises the following five people: a president, a vice-president, an accountant, a secretary, and an account controller. Figure 2 shows, on a district level, that all prepayment scheme bureaus assemble themselves to elect their district Federation of Prepayment Schemes, which, like the health center level, is comprised of a president, vice-president, accountant, secretary, and an account-controller. In September 1999, the first prepayment scheme began organizing general assemblies (that included all members) to elect five executive bureau members (from among the prepayment scheme members) to replace the original sector and cell representatives. By the end of January 2000, all executive bureau members were elected in general assemblies, with some of the founding bureau members reappointed.

**Figure 2. Representation of Population in Prepayment Schemes (PPS)**




The Minister of Health supported the constitution of prepayment schemes during the pilot phase through an official declaration letter based on the National Health Policy. However, the schemes aimed to attain association status as their legal base. Until then, each prepayment scheme had its by-laws (Règlement d'Order Intérieur) which, like the by-laws of an association, describe in 46 articles the objectives and operation of the schemes (see annex A). Once constituted, each prepayment bureau signed a contract with the attached health center, defining in 17 articles, the rules of collaboration between the different players (see annex B). Both the by-laws and contract were defined during the workshop discussions about the schemes' modalities. They were set up in consultation with legal counsel, following the requirements of the Rwandan Law on Associations.

The way prepayment schemes are organized—holding regular discussions and elections in general assemblies with their members, and following a contractual relationship with their partners—contributes to democratization in Rwanda, to empowerment of ordinary people, and to the reconstruction and reconciliation of civic society five years after the genocide.

### 3.2.4 Provider Payment in Health Centers and Hospitals

Because of the complex administrative and financial management that a fee-for-service provider payment would require, prepayment scheme managers rejected reimbursement of providers on a fee-for-service basis. Providers and scheme managers agreed to pay health centers a monthly capitation rate for members. Hospitals will be paid a negotiated per episode payment for cesarean sections, malaria, and pediatric cases as well as a fee-for-service rate for physician consultations and overnight stay.

#### 3.2.4.1 Capitation Payment in Health Centers

Since August 1, health centers and hospitals contracting with prepayment schemes have been paid prospectively. Health centers receive a monthly capitation rate according to the number of members of the schemes and their resulting annual premium fund. Members identify their health center as a first contact or a preferred provider.

Health centers' overall capitation rate paid per member per month—is divided by two, with the first half being paid as a base payment at the beginning of each month, and the second half paid as a quality payment at the end of the month. Quality payment eventually will depend on health centers' quality performance, such as data completion, quality treatment, and health center administrative performance. So far, full quality payment has been paid to all health centers at the end of each month in order to give them time to adjust to the change from fee-for-service to capitation payment and to improve validity of data collected. After a certain period, quality payment will be defined based on the quality of data reported. In a second phase, the following criteria and indicators (Table 12) will be applied to quarterly define quality reimbursement of health centers for a period of three months.

**Table 12. Quality Payment Criteria and Indicators**

| Quality Payment Criteria | Indicator |
|---|---|
| Availability of drugs at health centers | Number of days the health center is out stock of 9 essential drugs |
| Utilization of preventive care services | Vaccination coverage among all patients |
| | Prenatal coverage among all patients |
| Utilization of curative care services | Consultation rate at health centers among members |
| | Health center deliveries as a ratio of prenatal care consultations |
| | Risk pregnancies referred to hospital as a ratio of prenatal care consultations |
| Health promotion in health centers | Number of public meetings on STDs and AIDS offered |
| Administrative collaboration | Participation rate in Health Information System reporting |
| | Rate of correctly filled in patient register summaries submitted |

The MOH aims to define quality payment based on health center performance. Table 13 illustrates a health center performance ranking on a scale from one to five, and the percentages applied to rate them. Health centers receive full quality payment equal to 100 percent of base payment if they score optimal results, with a number one ranking. This results in a full 100 percent capitation payment. Health centers with poorest quality performance receive a rank of five. They will receive full base payment and a quality payment calculated as 60 percent of the base payment. Thus, their

overall 80 percent capitation payment will be composed of two factors, namely 100 percent base payment, corresponding to 50 percent of full capitation payment plus quality payment defined as 60 percent of base payment.

**Table 13. Components of Capitation Payment**

| Rank | Base capitation payment as a% of full capitation payment (a) | Quality Payment as a% of base capitation payment (b) =% of (a) | Total capitation payment (a) + (b) |
|---|---|---|---|
| 1 | 50% of full capitation amount | 100% of base payment | 100% of full capitation amount |
| 2 | 50% of full capitation amount | 90% of base payment | 95% of full capitation amount |
| 3 | 50% of full capitation amount | 80% of base payment | 90% of full capitation amount |
| 4 | 50% of full capitation amount | 70% of base payment | 85% of full capitation amount |
| 5 | 50% of full capitation amount | 60% of base payment | 80% of full capitation amount |

Currently health center staff in public and mission health centers are employed and paid by the government or the health center. Staff salary is supplemented by a bonus (averages about 25 percent of salary) paid by international and non-governmental organizations or by the health center. With the introduction of quality payment, health centers are entitled to pay personnel a "qualit supplements their current bonus. For example, health centers with a ranking of three, will receive their full base payment and a quality payment in the amount of 80 percent of their base payment, resulting in 90 percent of the overall capitation payment (Table 13). Table 14 shows that this quality bonus depends progressively on health centers' quality payment received. In this example, staff will be paid a monthly quality bonus, which equals to 5 percent of the quality payment received.

**Table 14. Monthly Quality Bonus Paid to Staff as a Share of Quality Payment**

| Rank | Quality Payment in % of base capitation payment (a) | Staff's Quality Bonus in % of Quality Payment % (a) |
|---|---|---|
| 1 | 100% of base payment | 10% of quality payment |
| 2 | 90% of base payment | 7.5% of quality payment |
| 3 | 80% of base payment | 5% of quality payment |
| 4 | 70% of base payment | 2.5% of quality payment |
| 5 | 60% of base payment | 0% of quality payment |

The staff's monthly quality bonus should compensate personnel for eventual income loss with less "under the table" payment due to the prepayment scheme direct payments to the health centers' bank accounts. At the same time a quality bonus motivates health center personnel to improve quality of care, which will attract more prepayment scheme members, thus leading to higher quality payments that consequently result in a higher quality bonus.

The main constraints in implementing quality payments are the lack of reliable data and human resources, which could provide the necessary information and analysis on a regular and ongoing basis.

#### 3.2.4.2 Per Episode Payment in District Hospitals

Prepayment schemes reimburse the two public hospitals in Byumba and Kabutare on a per episode rate per cesarean section, and on a per service payment for overnight stays and physician consultation. All medical benefits (cesarean section, malaria, and pediatric cases) at the mission hospital in Kabgayi are reimbursed per episode. Rates for these services/episodes have been set prospectively. Prepayment scheme members pay the usual FFS prices for all other hospital services not covered by the scheme.

#### 3.2.4.3 Expected Impact of Payment Changes

Capitation and per episode payment can be expected to change provider behavior in several ways. Prospective payment involves providers in sharing the risks of health care costs. Providers will have to manage prepayment scheme members' health needs within the given capitation and per episode budgets. As a result, health centers' and hospitals' remuneration may fluctuate according to the type and level of care provided, and providers will become stakeholders in the active management of the health risks and needs of prepayment scheme members.

A population's demand for health care will increase once members become part of an insurance scheme. This increased demand can be slowed down to a certain extent by reimbursing providers by capitation payment. However, the adverse effect of capitation payment, which is under-provision of services, might very well be compensated by insurance effects, such as moral hazard and increased utilization by a population with an unmet demand for care, which has been unsatisfied for a period of time.

In response to the increased demand for care, health centers will need to hire and attract better qualified personnel. On the other hand, with increasing membership, a prepayment scheme will gain market power and could become a future oligopsony, demanding lower rates per episode or per member, or requiring higher quality standards. Providers could react to lower rates paid by the prepayment scheme by increasing the prices for non-members or increasing efficiency in the provision of care. Lower rates for members and higher charges for non-members will cause more patients to join the schemes.

Capitation payments will motivate health centers to provide more preventive care services, more assisted deliveries and to refer more members to the district hospital, where only certain services are covered by the prepayment scheme. Hospitals receive per episode payments for certain diagnoses, thereby inducing them to increase their efficiency and provide care within a set financial frame, or to shift costs to other treatments, causing price increases in the non-covered services and fee-for-service section. On the other hand, if per episode rates are above hospitals' marginal costs, providers will seek to increase the number of episodes provided for this diagnosis. However, hospitals have limited scope to do so since they only receive scheme members on referral by health centers. Prepayment schemes will reimburse the two public hospitals by negotiated fee-for-service rates for overnight stays and physician consultation and leave the rest of the treatment (drugs, laboratory, x-ray, etc.) to be co-paid by members, who—depending on their price elasticity—have little incentive to remain hospitalized unnecessarily.

In response to increasing market power of prepayment schemes, providers could eventually organize themselves (there is no anti-trust law) to negotiate contract conditions. To state their case successfully, they will need data documenting their performance. This could encourage them to collect and evaluate utilization and finance data, and as a result contribute to the improvement of current rather limited data availability in the health care sector.

### 3.2.5 Quality Improvement Interventions

The MOH identified four major constraints for the implementation of prepayment systems, namely (1) a lack of quality of care provided in health centers, (2) the need to inform the population about solidarity mechanisms related to health care financing, (3) providers' need to be trained given the change in health care financing and provider payment mechanisms, and (4) future prepayment scheme managers' need to be trained in the successful management of insurance schemes. In addition, the MOH anticipated logistical constraints at district pharmacies limiting the availability of drugs for health centers in case of an increased drug demand once 30 percent of the population had signed up with prepayment schemes. Therefore, the effective implementation of prepayment schemes is supported by four ongoing activities that aim to improve quality and availability of care as well as strengthen management capacities on the provider and payer side given the change in health care financing and its implications. The four following interventions strive to address these issues.

First, during eight days of workshops in each of the three districts, providers learned about the effective use of available resources, the correct prescription of drugs and the systematic application of standardized treatment protocols for the five most common diagnoses. During the implementation phase, health centers were visited every two months to follow up on treatment patterns, drug prescription and prices. Second, the by-laws of prepayment schemes allow the possibility of investing a part of the premium fund in a loan to the district pharmacy in order to improve the availability of drugs in the district. This loan is managed by the Federation of Prepayment Schemes and has to be reimbursed in monthly tranches. The district pharmacy will have additional resources available to stock up with essential medicines that will be dispensed in health centers and in the district hospital in order to respond to the expected increased demand for drugs that will occur when prepayment schemes reach more than 30 percent of the district population among their members. Third, during 22 workshop days, prepayment scheme bureau teams in the three districts were trained to manage schemes financially and administratively to ensure financial and membership reporting, provider payment, and the functioning of the schemes. Fourth, management capabilities on the provider side were enhanced during 12 workshop days. Administrators and nurses in charge of health centers and hospitals have been and continue to be trained to use financial and administrative management tools adjusted to the requirements of prepayment financing mechanisms and are also informed of the change in provider payment from fee-for-service to capitation payment.

The correct implementation and impact of these activities was overseen by regular follow-up workshops as well as by visits to health centers and prepayment bureaus every two months during the test year. In summary, the workshops and field visits showed the need to assist health center personnel on a regular basis in the understanding of standard treatment protocols and drug prescription. Although health center directors and committees are financially in charge of their health centers, workshop discussion revealed that there was a lack of understanding about basic cost and revenue concepts as well as the pricing of services. The latter was of major concern, since health center committees tend to set their drug and service prices autonomously, ignoring any recommendations from their district administration. The workshop training was designed to improve these medical, organizational, and financial weaknesses.

### 3.2.6 Management Capacity

From the beginning of prepayment schemes, several accounting and administrative tools had to be developed and added to manage new financial and administrative systems in health centers, district hospitals, and prepayment scheme bureaus. Table 15 provides a list of newly introduced journals and accounting books, their users, and purposes. On the provider side, the three tools listed in Table 15

are added to a cash/bank book, revenue/expenditure book, and the monthly SIS report, which captures health centers revenue and expenditure information on its last page.

**Table 15. New Management Tools**

| Accounting and Administrative Tools | User | Purpose |
|---|---|---|
| Member patient registry (in addtition to already existing register for non-members) | Health Center and Hospital | Tracks members' drug and service utilization pattern in detail. To be used for comparison with non-members. |
| Monthly summary of member patient registry (in addition to monthly SIS report on non-members) | Health Center | Summary of members' care as reported in detailed register. To be used for comparison with non-members. |
| Prepayment journal of members' care | Health Center | Compares captitation payment to health centers with fee-for-service charges per sick member that would have been paid if health centers were reimbursed by FFS. |
| Cash and bank book | PPS bureau | Tracks cash and bank activities. |
| Revenue and expenditure journals | PPS bureau | Summarizes daily revenue / expenditure activities as tracked in cash book. |
| Monthly treasury book | PPS bureau | Monthly summary financial report on PPS revenue and expenditures. |
| Membership book | PPS bureau | List of members' demographic and premium information. |
| Membership cards for 3 categories (individual, family, group) | PPS bureau | Identity card entitling members to receive PPS benefit package. |
| Members' socio-demographic information sheet | PPS bureau | Summary of socio-demographic information on each member/family filled in when members sign up and pay premium. |
| Membership book on indigent members | PPS bureau | List of indigent members exempt from paying premium |
| Monthly summary report on new members and premium amount collected | PPS bureau | Summary of new members per membership category and total premium amount collected |
| Book on members leaving PPS | PPS bureau | List of members leaving PPS |

The additional utilization and financial information collected in health centers and hospitals will allow utilization, cost, and finance comparison between members and non-members. The current health information system SIS is being expanded to incorporate additional information on members utilization and providers' financial situation after the one-year pilot phase. The three newly introduced tools on the provider side will then become redundant.

In each district, health center administrators and prepayment scheme bureau members were trained over the course of seven workshop days to understand the purpose and correct use of the newly introduced tools. The secretary and the accountant in each prepayment scheme bureau are responsible for the correct use of the tools. During their supervisory visits every two months to all bureaus and health centers in the district, the Federation of Prepayment Schemes supervised the correct implementation of the tools following a checklist. PHR subsidized this activity with an administrative budgetary support to the three Federations.

### 3.2.7 Sensitization and Awareness Campaign

In ONAPO's focus group survey of August 1999 the rural population expressed several negative experiences with other solidarity funds and local associations, which negatively impacted prepayment schemes. Therefore during the entire development and implementation phase the sensitization and awareness campaign focused on informing the population about solidarity mechanisms, mutual health funds, and the detailed modalities of prepayment schemes. The main objective of the awareness campaign for prepayment schemes was to create trust among the population for the community-based approach to health care financing. This entailed motivating the population to take ownership of their own scheme and to make use of their democratic rights as members.

An information leaflet was developed that described the above modalities and provided answers to questions most frequently asked during the initial workshops and the awareness campaign. This leaflet was distributed during community meetings to inform the population about the schemes. In addition, each new member who signed up with the scheme received a one-page folder describing members' rights (benefit package, right on information, etc.) and responsibilities (payment of premium and co-payment, follow advice given by nurses etc).

Radio-spots were launched from the beginning of the implementation phase informing the population about prepayment schemes in the three districts and the importance of solidarity. At the end of September 1999, the MOH broadcast a three-and-a-half hour radio program on prepayment schemes during which the Minister of Health, pilot committee members, and the president of the Prepayment Scheme Federation of Byumba responded to questions from the population. Media presentations on prepayment schemes followed spontaneously, with regular radio broadcasts on members' experiences. A high point in the media coverage was an interview that Rwandan TV did with a member who delivered triplets at the Byumba hospital in January 2000 and who was covered by the scheme for overnight stays and physician consultations.

### 3.2.8 Indigent Members in Prepayment Schemes

The National Health Policy of 1995 states that an equitable health system provides the same access to services for the entire population and cost recovery should not become an obstacle to health care access for the very poor (Republic of Rwanda and WHO, 1995). In current practice, community authorities identify indigents in their communities based on locally defined socio-economic criteria. Indigents receive a personal card, which entitles them to free care in health centers (Republic of Rwanda, 1995). Health centers use revenue from paying patients and donor organizations to pay for costs for indigent care. In 1998, health centers reported their outstanding revenue created by providing care to indigents amounted to, on average, 5 percent of health centers' overall patient revenue.

Each prepayment bureau at the health center level may identify a number of needy people, who are allowed to join the system without paying the premium. The criteria to be classified as "indigent" are discussed and defined by the Federation. Based on these criteria, and on community judgement on a cell level, each prepayment scheme bureau is advised to identify 5 percent among its members as indigents. Paying members' premium includes coverage for this additional number of non-paying indigent members, who would otherwise be unable to join.

The prepayment scheme premium for indigent members in Butare has been subsidized by the Bishop of Butare, who paid annual premiums for a group of about 3,000 widows and orphans living in the communities of Kabilizi and Karama (District of Kabutare). The Bishop's generous gesture is

an efficient way of targeting health care subsidies to those most in need, thereby fostering equity in access to care.

This chapter has described the community-based development and implementation process of prepayment schemes in the three districts. The timely launch of schemes in the three districts has shown it is possible to develop and implement rural health insurance schemes with strong community participation and within a very short time-frame in Rwanda, a country that ranks amongst the poorest in the world. At the same time, providers have been learning and adjusting to new financing mechanisms, while the population is finding a forum to express in a democratic way their preferences related to health care. The following chapter will describe the process used to provide information and evaluate the impact of prepayment schemes relative to the objectives of the MOH.

# 4. Monitoring and Evaluation

## 4.1 Monitoring

A quasi-experimental design is being used to monitor and evaluate the performance of prepayment schemes and their impact on utilization, cost and financing of the provision of care in health centers and hospitals (Rossi et al., 1999). Over a two-year period (base year: August 1998–July 1999, and test year: August 1999–July 2000), providers' performance has been documented monthly with routine quantitative data collected from the three pilot and two control districts Bugesera and Kibungo. Information collected will allow comparison between the three pilot and two control districts during the year before (August 1998–July 1999) and the year of the implementation of prepayment schemes (August 1999–July 2000). All 53 prepayment scheme bureaus submit monthly data on their membership and financial situation during the test year. Health centers and district hospitals in the five districts report their utilization, personnel, drug, cost, and resource situation during base and test year. Analysis of information collected is ongoing throughout the test year. During its monthly meetings, the central prepayment scheme steering committee discusses the latest findings on provider and prepayment scheme performance to pass on recommendations to the bureaus, health centers and hospitals in the three pilot districts. Continuous monitoring and monthly feedback on performance to all stakeholders allow for continuous course corrections.

Routine data on provider and prepayment scheme are supplemented by additional quantitative and qualitative data collected from three surveys, namely (1) a patient exit interview survey, (2) a focus group survey on beneficiaries' and non-beneficiaries' perceptions of prepayment schemes, and (3) a household survey on households' health care demand and behavior.

## 4.2 Evaluation

The evaluation of prepayment scheme performance aims to document how well prepayment systems respond to the four overall objectives of the MOH as described in Table 16. This table shows specific indicators to measure schemes' and providers' performance as well as the monitoring tools being used to collect the necessary information.

**Table 16. Monitoring Prepayment Scheme Performance**

| Objectives | Indicators | Instruments |
|---|---|---|
| Improve financial access to health care | Difference in use of health services by PPS members vs. non-members.<br>Difference in use of health services among the 40% poorest member households vs. non-member households<br>Household ability to pay annual PPS contribution: ratio of annual PPS contribution to average household expenses.<br>40% of poorest households ability to pay annual PPS contribution. | Health center monthly data<br>Household survey<br>PPS monthly data and household survey<br>Household survey |
| Improve quality of care | Number of days when selected drugs were out of stock at health center<br>Rational drug use: ratio of drug values consumed to number of consultations over specific time period<br>Continuity of preventive care services, namely vaccination and prenatal care visit<br>Patient satisfaction with waiting time, how well they were received by personnel, with information received from providers; proportion of patients who acquired prescripton of medications. | Health center monthly data<br>Health center monthly data<br>Health center monthly data and household survey<br>Patient exit interviews in health centers |
| Strengthen management capacity | Correct use of management tools in health centers<br>Difference between cost recovery ratio before and during the pilot test at health centers<br>Correct use of management tools by prepayment scheme bureaus.<br>Financial viabilty of prepayment schemes: ratio of PPS revenue over expenditure and ratio of administrative costs over PPS revenue. | Health facility checklists<br>Health center routine data<br>PPS checklists<br>PPS routine data |
| Strengthen community participation | Proportion of district population that are PPS members.<br>Proportion of population among the 40% poorest households that are PPS members.<br>Mobilization of financial resources expressed as difference in per capita revenue mobilized the year before and during the test year.<br>Management participation in PPS, expressed as proportion of elected members participating in executive bureau meetings. | PPS routine data<br>Household survey<br>Health facility routine data<br>PPS checklist |

*Source*: Diop. 1999.

In June 1999, an evaluation plan was developed outlining the following research questions related to the four overall objectives (Diop, 1999):

1. What is the impact of prepayment schemes on households' ability to pay for health care? What is the impact of prepayment schemes on the financial access to health care? How will demand for curative and preventive care be affected?

2. How will the quality of care in health centers be impacted by prepayment schemes? What is the effect on the availability of drugs and on the rational use of resources in health centers? And how will the level of patient satisfaction differ between members and non-members of the schemes?

3. What effect do prepayment schemes have on health center management capacities? How will the use of management tools be affected? And what is the impact on cost recovery? What is the share of health center costs financed by prepayment schemes?

4. How will prepayment scheme management capacities and financial viability evolve over time? What is the impact of prepayment schemes on community participation? At what degree will the population participate in the schemes?

The systems' evaluation provides answers to these questions as well as documentation of the overall performance, financial relationship between prepayment schemes and health care providers and the organizational development of prepayment scheme bureaus. The systems' comparative sustainability, viability, equity, and efficiency shall support the MOH in its recommendations on which types of health financing schemes are most suited to be launched in other districts in Rwanda.

# 5. Preliminary Results

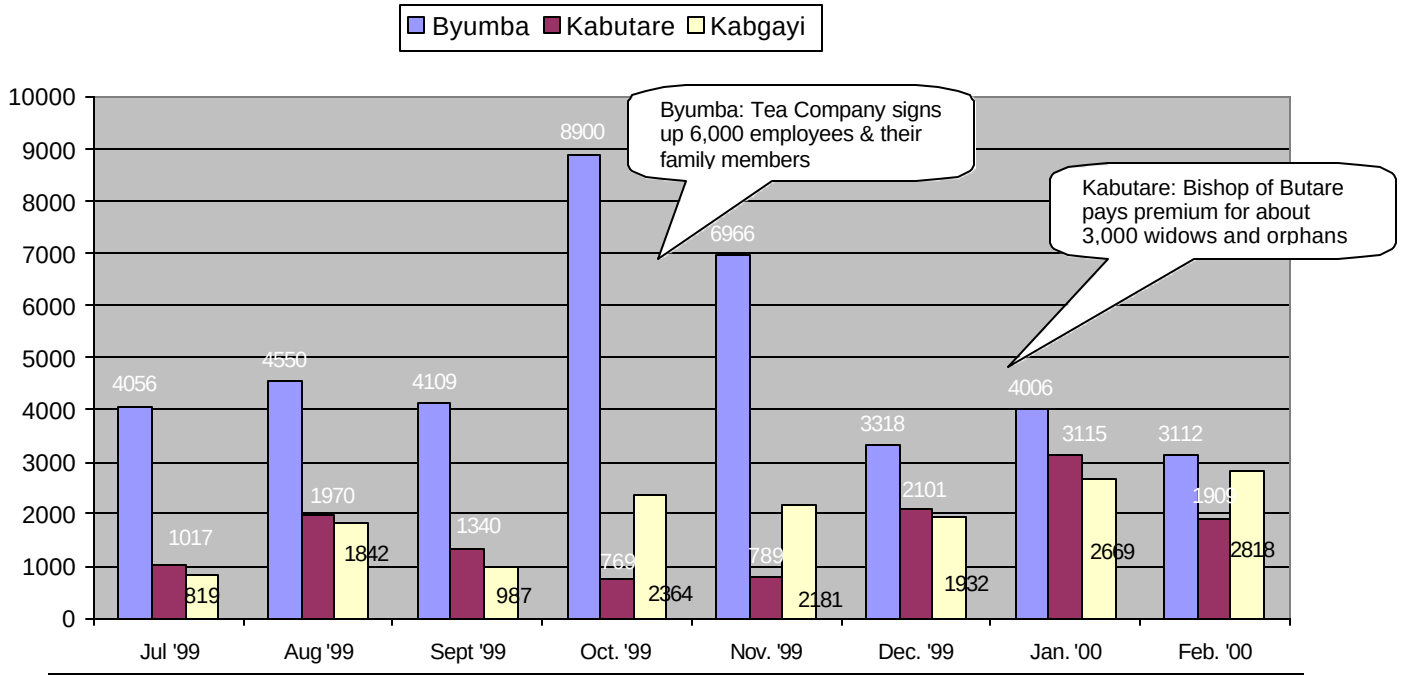
Data collected from the year before prepayment schemes were launched as well as during the first six months of operation reveal the first results of the systems' performance.

## 5.1 Enrollment in Prepayment Schemes

Acceptability of prepayment schemes is expressed by the proportion of the population participating in prepayment schemes. During the first six months, more than 50,000 Rwandans, 4.6 percent of total district population, have signed up in the three districts. Of these members, 31,899 lived in Byumba (7 percent of district population), 7,986 in Kabutare (3 percent of district population), and 10,125 in Kabgayi (2.8 percent of district population).

Figure 3 shows that monthly subscription in Byumba started on a higher level (4,000 new members) compared to the other two districts (between 1,000 and 2,000 new members). This was mainly driven by two centers that had prior mutuelle experience (Bungwe and Rushaki). This subscription pace was maintained in Kabutare and slightly decreased in Byumba, with the exception of some outlier months (October: 8,900 and November: 6,966 new members) in Byumba, when employees of a tea company signed up. The Bishop of Butare paid the premiums for about 3,000 widows and orphans over a period of three months, thus boosting membership in two prepayment scheme bureaus in Kabutare (Karama and Kabilizi). Kabgayi steadily increased its monthly subscription from 819 new members in July to more than 2,800 new members during the month of February 2000. Also, within the districts, considerable enrollment differences existed between the bureaus, ranging from 20 to more than 1,000 new members per prepayment scheme bureau per month.

**Figure 3. Monthly Prepayment Scheme Enrollment in Three Districts**



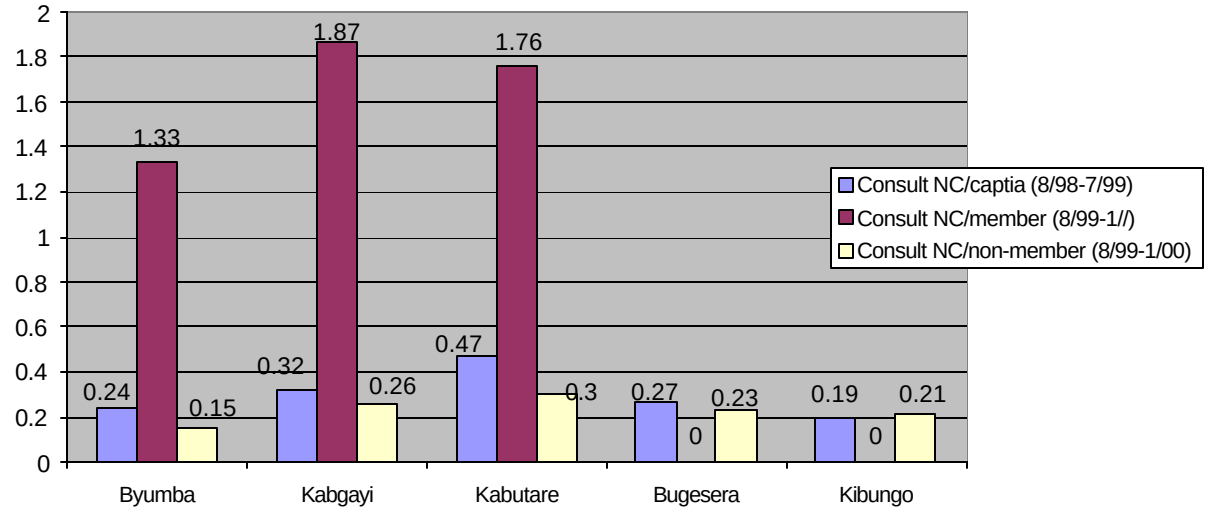
Although an overall membership pool of 50,000 people within six months is large compared to other mutual health experiences, this result is still far from the Ministry's benchmark of 30 percent of the three districts' populations, or 320,000 members. Prepayment executive bureau members relate that for many Rwandan families the FRw 2,500 premium is a significant amount of money, and several household needs and expenditures compete for this amount, with health care often receiving lower priority. Also, solidarity is not very strong in a society that went through a genocide only five years ago. Thus, it is of no surprise that focus groups suggested that only sick people should become prepayment scheme members. Trust is another important factor. Although representatives of the population manage prepayment schemes, people do not necessarily trust them. In addition to trust, there are organizational and functional limitations in prepayment scheme bureaus and health centers are blocking people from signing up.

## 5.2 Utilization of Health Services

Since 1998, several health centers have increased their drug and service prices. Some health centers doubled their consultation prices from FRw 100 to FRw 200 (e.g. Gisagara), and others increased their drug prices which resulted in average profit margins of up to 300 percent compared to the district pharmacy sales price (e.g. Giti). Thus, it is of no surprise that during 1999, the country's overall per capita consultation rate in health centers dropped from an average of 0.28 in 1998 to 0.24 consultations in 1999, a worrisome low level.

After the first six months of documenting provision of health care to prepayment scheme members, quantitative data collected in health centers show a considerably higher usage rate among members compared to non-members. Figure 4 reveals that non-members' consultation rates for new cases either decreased to levels lower than that exhibited the year before prepayment schemes or these rates remained at a low level of around 0.2 per capita in all five districts. Members visited health centers more often and there were 1.3 new case consultations per member in Byumba, 1.87 in Kabgayi, and up to 1.76 consultations per member in Kabutare during the first six months. Members' consultation rates were between three and six times higher than consultation rates reported by health centers before prepayment scheme implementation.

**Figure 4. Consultation New Case (NC) per Capita in Health Centers (Aug. 1998-Jan. 2000 Annualized Rates)**



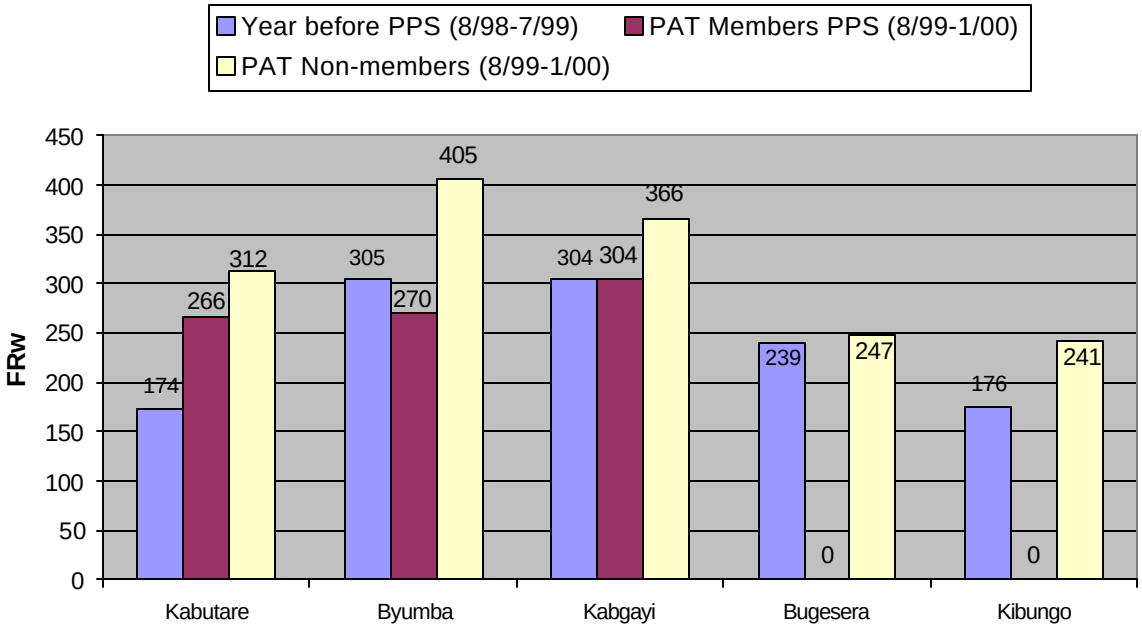
Over time, a poor population may accumulate an unmet demand for health care. If this is so, once they become members of an insurance scheme, they will satisfy their need for care.

Generally, hospital utilization during the first six months was low, at around 0.5 percent of members admitted to a hospital. However, during this time period, the district hospital of Kabgayi reported a three-fold increase in cesarean section deliveries among prepayment scheme members compared to members in Kabutare and Byumba.

## 5.3 Quality of Health Care

Using limited resources in a rational way will improve the quality of care provided. One quantitative indicator measuring this achievement is the value of drugs consumed in relation to the number of consultations given during a specified period of time. Figure 5 compares non-members' and members' drug value consumed per consultation during the year before the launch of prepayment schemes and during the initial six months (August 1999-January 2000) of implementation. Overall, the value of drug consumption in the three districts has increased for non-members. This increase is mainly due to health centers' increased drug prices. Compared to the base year, members' drug consumption increased at a slower pace in Kabutare, decreased in Byumba, and remained on the same level of FRw 304 per consultation in Kabgayi. Non-members consumed a higher value of drugs per consultation than members of prepayment schemes. Over time, drug consumption remained at a lower level in the two control districts, Kibungo and Bugesera.

**Figure 5. Average Drug Value Consumed per Consultation NC (FRw)**




This difference in drug utilization between members and non-members points to an observation reported by health center personnel: members seek care earlier than non-members, and thus members need fewer drugs per consultation, resulting in less costly cures and faster recoveries.

Prepayment schemes have also contributed to improved quality on a structural level that is related to prices in health centers. Although health centers were supposed to apply a 10 percent mark-up on their drug cost, prepayment scheme data showed that some providers reported average profit ratios of up to 300 percent on their drug revenue. As a result, health centers were required to follow district rules when defining drug sale price, and to decrease drug prices for members and non-members to the suggested level. In addition, several health centers were lacking a sufficient number of qualified personnel. Due to additional management capacity required by prepayment schemes, the district of Byumba replaced health center directors, who were auxiliary personnel, with trained nurses in five health centers. This illustrates another way in which quality indicators improved as a result of prepayment schemes.

## 5.4 Resource Mobilization and Cost Recovery

The successful mobilization of additional resources through prepayment schemes can be measured by comparing members' and non-members' per capita contribution to health centers[4]. Figure 6 reveals that health centers received twice as much contribution per capita from members as compared to non-members before and after the launch of prepayment schemes. In the two control districts, Kibungo and Bugesera, per capita contribution in the population remained on a similar low level as in the pilot districts before the launch of prepayment schemes.

With non-members reporting decreasing consultation rates, their per capita contribution will further dwindle along with health centers' patient revenue. Members' higher per capita contributions—paid by healthy and sick members—show the financial potential of prepayment schemes. As a result, health centers may improve their cost recovery rate if care is not over-supplied to members and health centers operate on an efficient average fixed cost level.

This chapter has summarized the preliminary findings of prepayment scheme impact. Results of the first six months of prepayment schemes reveal that the rural population is willing to prepay for community-based health care services. Beneficiaries of prepayment schemes use care more often than non-members, consume on average a lower drug value per visit, and contribute on a per capita basis more than twice as much to primary health care than non-members do. Overall, the majority of health centers in the five districts have reported decreasing consultation rates. At the same time, many health centers do not adjust their fixed cost structure in terms of free capacity of personnel and infrastructure. As a result, health centers, which depend financially on fee-for-service payments, will report lower cost recovery rates. On the other hand, cost recovery rates of health centers with large membership pools will increase with growing member numbers, increased consultations rates and improved efficiency in the provision of care.

[4] Non-members contribution = contribution of total district population who are not prepayment scheme members and who paid for care in a health center during the time period. Members contribution = health centers' monthly capitation revenue plus co-payments received from members who seek care divided by the total number of scheme members.

# 6. Preliminary Conclusions and Next Steps

## 6.1 Preliminary Conclusions

During its monthly meetings the steering committee shared and evaluated information on prepayment scheme performance, the financial relationship with health care providers, and their organizational development. Discussing and understanding these changes served as a basis to draw preliminary conclusions on the development and implementation phase of the prepayment scheme pilot.

### 6.1.1 Basis for the Design

Prepayment schemes have been developed and implemented in an environment of strong community participation, which responds to the need of the rural population to improve access to primary health care. Prepayment scheme beneficiaries in the three districts pay an annual premium that, after a one-month waiting period, entitles them to care in 53 public and mission health centers, and to a limited package in three district hospitals. Prepayment schemes pay hospitals and health centers on a monthly basis that is defined by the overall premium fund. While hospitals are reimbursed a per episode payment, health centers receive a monthly capitation rate that is determined by the size of their membership pool. Per episode and capitation payments are easy to administer and promote timely payment of providers. The management of prepayment schemes and financing of members' health care requires prepayment scheme bureaus to have well functioning organizational capacities, institutionalized management tools, and a well-defined collaboration with contracting health centers and hospitals.

The launch of prepayment schemes was supported by regular district workshops with health center and prepayment scheme representatives. Prepayment scheme modalities, organizational and financial management of schemes, sensitization and awareness campaigns, financial relationship with providers, and quality of care provided were main discussion points on these workshop agendas. Discussion results were forwarded to the steering committee and formed the current legal basis of prepayment schemes. Prepayment schemes have been formulated into by-laws (Règlement d'Order Intérieur), which describe objectives and operations of the schemes (see Annex A), and also describes the contract with the attached health center, and the rules of collaboration between the different players (see Annex B).

### 6.1.2 Constraints Faced during Implementation

The main constraints faced during the implementation phase were issues related to prepayment scheme organizational development, sensitization and awareness campaign, and leadership. Dynamic prepayment executive teams, who regularly organized general assemblies including members, community and health center representatives, headed several bureaus in the three districts. These bureaus took responsibility for their tasks, organized their work in a very structured way, and were accessible for the population. Other bureaus were headed by teams who were not primarily interested in prepayment schemes and the work related to it, but rather in gaining a reputation in their

community by being member of another executive bureau. Bureaus that did not replace these members sooner or later reported serious organizational issues, such as poor administrative and financial accountability. As a result, in some cases, health centers (e.g. Matyazo in Kabutare) started to take over bureau responsibility and sell membership cards to ensure steady enrollment.

In certain cases membership enrollment was blocked by health centers that were against prepayment schemes (e.g. Gisagara in Kabutare). Although the scheme executive bureau received full support of the community leaders, the population would not sign up and complained about the health centers lack of cooperation.

Some health regions, districts, and prepayment scheme bureaus showed leadership in organizing awareness and sensitization campaigns that invited local leaders (e.g. Byumba), whereas others lacked this kind of initiative or started only later in the process.

Generally, leadership was a key issue in overcoming constraints and enhancing organizational performance of prepayment schemes (e.g. in Ruhango, Save, and Rushaki).

### 6.1.3 Favorable Factors

Several factors supported the successful development and timely implementation of prepayment schemes. One of the key factors was the political will of the Ministry of Health to improve people's access to primary health care by offering alternative financing mechanisms. The MOH financial and personnel commitment to prepayment schemes over time will ensure their organizational continuity and long-term sustainability. Local key players such as clerical and administrative authorities have important roles in informing the population about prepayment schemes and supporting enrollment as the following example shows. The Bishop of Butare paid the prepayment scheme premium for more than 3,000 poor widows and orphans, thus improving access for women and children in the communities of Karama and Kabilizi, while at the same time the addition of members increased the financial autonomy of the two health centers.

Prepayment scheme bureaus which partnered with health centers that had previous mutuelle health experience (Rushaki and Bungwe in Byumba) showed better enrollment results overall. The population in these communities already had some common understanding and experience with solidarity funds. They were quicker in making a decision and signing up with prepayment schemes than those without this experience.

Prepayment scheme bureaus, which developed leadership and were pro-active in their approach, reported steady enrollment rates and the best organizational functioning (e.g. Rushaki, Bungwe, Ruhango, Save, Musambira).

### 6.1.4 Membership

Membership grew steadily in the three districts. Active periods occurred (October 1999) when enrollment received support by employers or the churches, and less active periods (January and February 2000) occurred when prepayment premiums competed with other required household payments, such as taxes. After the first six months, prepayment schemes counted an overall membership pool of more than 50,000 members distributed in 53 local prepayment scheme bureaus in the three districts.

Regular sensitization and awareness campaigns, radio spots, and prepayment scheme general assemblies organized by prepayment schemes encouraged enrollment. Specially, general assemblies with prepayment scheme members fostered a sense of ownership among members that led to critical discussions related to health care financing and provision of care. Soon, general assemblies became a forum for members to organize themselves, vocalize their questions and concerns about health care, and for health personnel to explain health related topics to the population.

### 6.1.5 Utilization of Health Services

Overall health care utilization in Rwandan health centers dropped from an already low 1998 level of 0.28 consultations per capita to 0.24 consultations in 1999. Thus, it is of no surprise, that prepayment scheme members report five times higher per capita consultation rates in health centers (ranging from 1.3 to 1.7 consultations per capita) compared to non-members, suggesting that the latter face constraints in access to care. As expected, during their initial period prepayment schemes faced common insurance hurdles, such as adverse selection and an accumulated unmet demand for health care among members.

On the other hand, declining utilization rate have been experienced among non-members in Rwanda who are still dependent on a health system financed by fee-for-service. For health centers this will mean lower or fluctuating revenue, since health center financial viability depends on the extent to which they are able to cover their fixed and variable costs with patient revenues. Thus, it is essential to improve access to care by extending health coverage to the poor in Rwanda, while at the same time improving health centers' financial sustainability.

## 6.2 Next Steps

Based on these preliminary findings, the MOH decided to strengthen the current experience with prepayment schemes in the three pilot districts. In response to the growing demand for prepayment schemes in other regions in Rwanda, the MOH started to identify areas (e.g. Ruhengeri) where local authorities are interested in launching prepayment schemes, or have already initiated their own experiences. During a three-day workshop in Kigali in March 2000, more than 50 participants from the three districts discussed their experiences with prepayment schemes. Discussions led to the formulation of the next steps to be implemented on a regional level.

### 6.2.1 Strengthening Sensitization Campaign

The current sensitization campaign needs to be intensified to ensure that the population in the three districts is well informed about prepayment schemes. The MOH continues to broadcast regular radio spots about the schemes' specifics, such as the solidarity between the sick and healthy members and the announcement of a general assembly of prepayment scheme members. Regular interviews with beneficiaries are broadcast on national radio and TV. For example, a TV documentary broadcast during the evening news featured the president of the federation and the district representative interviewing a mother, a prepayment scheme member who delivered triplets at the Byumba hospital. An additional promotional strategy and campaign will be developed and implemented to ensure the population understands the concept of prepayment schemes.

Local political and religious authorities play a key-role in teaching the population about solidarity between the sick and the healthy and in convincing private households to contribute to

health care through their prepayment scheme membership. Therefore, the participating health regions decided to get in touch with an already existing multi-disciplinary committee at the prefecture level. This committee, headed by the Sous-Prefect, creates a sub-group in charge of enhancing current sensitization and organizational efforts with the existing schemes, as well as identifying and responding to requests to extend prepayment schemes to other areas in the same health region.

Prepayment scheme and health center representatives together with local authorities continue to visit their community catchment area and to talk with the population during community meetings, informing them about prepayment schemes and responding to their questions. These meetings lead to a sense of ownership of health related issues among the members, giving them a reason to re-subscribe once their annual membership expires, provided that they were satisfied with their membership.

### 6.2.2 Strengthening Organizational Development

Strengthening organizational development requires the MOH on different levels to continuously support prepayment scheme bureaus as well as health care providers. Well-organized prepayment scheme bureaus are a prerequisite for the schemes' operational and financial functioning. They create trust in the population that attracts new members. The organizational potential of such membership pools goes beyond their main objective, which is improved access to care. General assemblies provide a "consumer forum" for members to meet with health care providers and discuss issues and concerns related to health care and health financing. Provider representatives may use these forums to present health related subjects, such as vaccination, malaria prevention, AIDS, etc. Also, once they are established, prepayment schemes could use their market power in negotiating an improvement in efficiency and quality of health care delivery. During the remaining months, training workshops will be held in the three districts focusing on organizational functioning of prepayment schemes and issues related to their financial relationship with health care providers.

Prepayment bureaus as well as their federation on a district level will need to continuously adjust and strengthen their internal organization, as well as their collaboration with neighboring bureaus, the federation of prepayment schemes, and health care providers. Prepayment bureaus experiencing internal organizational problems should immediately replace executive bureau members who are not fulfilling their responsibilities with new members elected by the general assembly, a process overseen by the federation. The federation also fosters organizational development by regularly organizing training sessions with bureau members on a district level. During these training sessions, subjects related to finances, membership, organizational issues, logistics, awareness and marketing campaign, reporting systems, and collaboration with providers are discussed.

On the health care provider side, the MOH endorses prepayment schemes as an instrument to improve quality of care in health centers, mobilize local resources and improve health center financial viability. Thus, district supervision of medical and paramedical personnel continues to focus on the correct use of standard treatment protocols and management tools, drug prescription, as well as the application of drug and service prices as recommended by the district. In addition to supervision, during regular workshops and monthly meetings allow health center representatives to discuss ways of improving health care provision and conducting health education. With an increased membership pool overall, demand for primary health care will increase in the three districts and create a need for drug availability in for the public sector. The current drug information system in Rwanda's health districts is being re-structured to improve logistical information on the availability of drugs in districts.

Health centers' financial viability over time is determined by evaluating information on utilization, cost, and revenue situation. This information can be used as a basis to set prices in health centers and calculate or adjust premiums for prepayment scheme members. During workshops, the information is explained to health center representatives. Information on health centers' financial situation may lead to recommendations on ways to decrease average fixed costs in health centers to improve provider productivity.

Prepayment schemes will need to receive formal legal status and become registered as associations under the Rwandan law. Once recognized, their contracts with mission and public providers need to be adjusted to fit the schemes' legal situation.

### 6.2.3 Evaluation Activities

An evaluation of prepayment scheme performance provided preliminary results of the schemes first six months in operation. Data collection of routine data in health centers and hospitals in the five districts will continue, covering an overall collection period of two years, one year before and one year during the experimental period. Also, monthly membership and finance data gathered from prepayment scheme bureaus will continue after the one-year pilot phase and will document members' re-enrollment rate during the first few of months of the second year. Providers' utilization, quality, and financial performance as well as prepayment schemes' membership will be evaluated quarterly based on routine date. Monthly results will continue to be discussed during the steering committee meetings, and used to strategically adjust modalities. Routine data will be analyzed to evaluate prepayment scheme and capitation payment impact on provider utilization, cost and reimbursement. The information thus provided will allow adjustments of premium and co-payment for the second year.

In addition to monthly routine data, survey data will be collected during the months of May and June 2000 to evaluate patient satisfaction with care received among members and non-members. A survey with different stakeholders will evaluate their perception of and experience with prepayment schemes. These data will also provide qualitative information on prepayment scheme bureaus' organizational performance. A household survey in the five districts will be conducted during the months of June/July to assess households' financial situation and prepayment schemes' impact on households' financial access to care. This survey will allow identification of the vulnerable groups among members and non-members and document their experience. The final evaluation will allow conclusions to be drawn on the socio-economic impact of prepayment in the three districts, including analysis of broader issues, such as health centers' management systems or the schemes' impact on the vulnerable population groups and drug availability. These evaluations combined will lead to conclusions and recommendations on alternative health care financing systems in Rwanda that will be presented to the MOH as an information base for the final workshop during the month of September 2000.

Data on costs of implementation of prepayment are collected over the entire development and implementation phase to provide information to the MOH in order to prepare for an eventual extension of prepayment schemes to other areas.

Qualité, Évaluation, Management » (QEM).

- à référer les membres qui ont besoin des services non offerts dans les centres de santé à l'hôpital de district.
- à appeler une ambulance en cas de transfert d'un membre à l'hôpital du district de Byumba.

[†] Republique Rwandaise, Ministere de la Sante, B.P. 84 – Kigali: Normes du District de Santé au Rwanda, Février, 1997

Le comité de gestion de la fédération des systèmes de prépaiement s'oblige :

- à vérifier la facture de l'hôpital pour les membres transférés en la comparant au registre de contact de l'hôpital et aux registres d'information de contact des centres de santé.
- après vérification, d'envoyer une copie du registre de l'hôpital à l'équipe 'Qualité, Évaluation,

- après vérification, à rembourser l'hôpital du district pour les soins couverts, tel que prévu à l'article

**Titre 5 : Les services des soins non-couverts par le système de prépaiement :**

**Article 7**
Tous les soins non prévus aux articles 5 et 6 ne sont pas couverts par le système de prépaiement.

**Titre 6 : L'accès aux services des soins couverts :**

**Article 8**
Les conditions de pouvoir bénéficier des services des soins couverts par le système de prépaiement, sont :

- d'être membre du système de prépaiement (titulaire ou personnes à charge inscrites sur la carte de itulaire)
- d'avoir terminé la période d'observation (voir carte de membre)
- d'être à jour dans le paiement des cotisations (voir carte de membre)
- d'avoir identifié un centre de santé de premier contact (voir carte de membre) et figurer sur la liste des membres de ce centre.

**Article 9**
Les modalités d'accès aux soins couverts par le système de prépaiement sont les suivantes :

- l'adhérent s'adresse à son centre de santé de premier contact, avec lequel le système de prépaiement a

- en cas d'urgence, le membre malade peut s'adresser au centre de santé le plus proche. Ce dernier enverra la facture de traitement pour paiement au centre de santé de premier contact du membre.
- chaque adhérent présente à la formation sanitaire sa carte de membre.
- pour avoir accès aux soins hospitaliers à l'hôpital du district sanitaire, l'adhérent présente un document attestant qu'il a été référé par son centre de santé de premier contact, sauf en cas d'urgence.

**Titre 7 : La rémunération des prestataires en convention avec le système de prépaiement**
Le paiement des soins de santé s'effectue comme suit :

**Article 10**
Les Centres de santé :

- L'adhérent malade paie le ticket modérateur de FRw 100 au centre de santé par épisode de maladie, et ices reçus lors du traitement. Le montant du ticket modérateur est défini dans l'accord entre l'adhérent et le système de prépaiement et ne peut en aucun cas être modifié par les prestataires des soins.
- Conformément au nombre des membres inscrits sur la liste par centre de santé, le système de prépaiement verse au début du mois le paiement de base au compte bancaire du centre de santé, et reçoit le registre d'information de contact du centre de santé
- Le système de prépaiement verse à la fin du mois le paiement de qualité au compte bancaire du centre de santé. Ce paiement est basé sur les directives de l'équipe 'Qualité, Évaluation, Management'.

**Article 11**
L'Hôpital du district de Byumba :

- La fédération des systèmes de prépaiement des zones de rayonnement re du RIC de l'hôpital, et rembourse l'hôpital directement pour les services couverts chaque fin du mois.
- La facturation est basée sur le tarif suivant :
  - hébergement dans la salle commune : Frw. 100 par nuit
  - consultation chez le médecin : Frw. 200 par consultation
- La facturation est basée sur le tarif suivant par épisode de maladie, y compris tout acte, médicaments, consultations, hospitalisation, matériels et traitement:
  - l'accouchement par césarienne : Frw. 12,000 par épisode

**Titre 8 : La qualité des services**

**Article 12**
Les services offerts dans les centres de santé et dans l'hôpital du district sont régulièrement évalués par l'équipe 'Qualité, Évaluation, Management' afin de s'assurer qu'ils correspondent toujours aux besoins des patients et qu'ils y répondent de façon satisfaisante, y compris :

- le diagnostic et le traitement selon les schémas de traitement standardisés et le contrôle de leur respect

- l'obligation de prescrire des médicaments essentiels génériques sur la liste du Ministère de la Santé.
- l'obligation de respecter les schémas des soins préventifs.
- l'obligation de respecter les directives pour les soins de qualité, telles que définies dans 'Les Normes du District de Santé au Rwanda'.
- l'obligation de respecter les directives administratives et de gestion.

**Article 13**
Cette évaluation faite par l'équipe 'Qualité, Évaluation, Management' permet de déterminer le paiement

**Titre 9 : Le contrôle médical**

**Article 14**
La prise en charge par le système de prépaiement de certaines prestations peut être soumise à des critères médicaux. Il peut s'agir, par exemple, du remboursement de la prolongation d'une hospitalisation au-delà d'une certaine durée. Dans ces cas, un jugement sur la base du dossier médical de l'intéressé, voire de l'état de santé du bénéficiaire s'impose. Cette tâche incombe à l'équipe 'Qualité, Évaluation, Management', qui assiste le système dans ses rapports avec les prestataires de soins, et conseille les membres du système par rapport à leurs problèmes de santé.

**Article 15**
L'équipe 'Qualité, Évaluation, Management' vérifie la pertinence et la qualité des soins donnés ou des
tant dans la politique de prévention et d'éducation à la
santé, et aide le système de prépaiement à organiser des campagnes d'information des membres.

**Article 15 bis**
Chaque trimestre, l'équipe 'Qualité, Évaluation, Management', sur la base de l'évaluation
la couverture des services, fait des recommandations sur la formation continue et la supervision du personnel de santé des centres de santé du district. Dans ce cadre, il peut recommander l'utilisation
s du comité de gestion de la fédération du système de prépaiement
pour supporter les activités de formation continue, de supervision, et d'éducation pour la santé.

**Titre 10: Les Formations Sanitaires concernées :**

**Article 16**
Les formations sanitaires concernées par la présente convention sont:

1. _____
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**Titre 11: Règlement des litiges**

**Article 17**
Toutes les contestations, non résolues devant le médecin de la région sanitaire de Byumba, entre les formations sanitaires et le système de prépaiement sont de la compétence du tribunal de canton de la zone de rayonnement.

Le présent accord entre le système de prépaiement et les formations sanitaires dans le district sanitaire de Byumba entre en vigueur le 1er août 1999 jusqu'au 31 juillet 2000.

**Noms, signatures, dates et lieux :**

| | | |
|---|---|---|
| Le Président du Comité de Gestion du système de prépaiement de la zone de rayonnement | Le Titulaire de la formation sanitaire | Le Président du Comité de Santé de la formation sanitaire |

Pour approbation :
**Noms, signatures, dates et lieux :**

| | | |
|---|---|---|
| Le Président du Comité de Gestion de la Fédération des systèmes de prépaiement du District sanitaire de Byumba | Le Médecin Chef du District comme représentant des formations sanitaires | Le Médecin Directeur de la Région Sanitaire de Byumba |

-ci sont constituées par :

a) les personnes âgées de 18 ans et plus qui ne sont pas mariées ;
b) les ménages, que sont les parents avec les enfants dépendants ;
c) les groupes familiaux, que sont les personnes qui habitent ensemble et partagent le ménage comme les veuves ou les enfants sans parents ;
d) les groupes, comme les associations, les coopératives, les écoles, les orphelinats (8+ personnes).

L'adhésion est demandée par le responsable de chaque catégorie d'adhésion.

Pour être assuré par le système de prépaiement tout responsable par catégorie d'adhésion doit détenir une carte de membre. Les personnes membres des groupes définis sous d
membre. En cas de besoin des services de santé, les personnes inscrites sur la carte de membre se présentent avec la carte dans leurs centres de santé de premier contact.

**Article 5**

L'adhésion est obligatoire pour toutes les personnes travaillant dans les formations sanitaires avec lesquelles le système de prépaiement a signé un contrat, sauf le personnel membre d'une assurance de maladie.

c) Les Bureaux exécutifs de ces Comités de gestion au niveau de la zone de rayonnement.
d) Le Comité de gestion de la fédération des systèmes de prépaiement du District sanitaire.
e) Le Bureau exécutif du Comité de gestion de la fédération des systèmes du District sanitaire.

**Article 9**
Tous les membres de ces instances doivent être des adhérents au système de prépaiement et détenir une carte de membre.

**Article 10**
L'Assemblée générale est l'instance suprême du système de prépaiement dans la zone de rayonnement. L'Assemblée générale se réunit une fois l'an, le dernier dimanche de janvier de l'année qui suit celle qui est concernée, en session ordinaire, et en session extraordinaire, chaque fois que nécessaire, sur
ne de rayonnement ou des 2/3 des membres.
L'Assemblée générale approuve à la majorité absolue les rapports et les recommandations présentés par le Bureau du comité de gestion de la zone de rayonnement.
Elle prononce les sanctions à la majorité des 2/3 des membres présents à l'Assemblée.

**Article 11**
Chaque zone de rayonnement d'un centre de santé constitue un comité de gestion du système de prépaiement. Les membres de chaque comité de gestion du système de prépaiement de la zone de rayonnement sont les titulaires et un autre représentant des formations sanitaires, et les délégués des secteurs couverts tels que:

a) les *conseillers des secteurs* couverts par la zone de rayonnement du centre de santé ;
b) les *chargés de santé et affaires sociales* élus des secteurs couverts par la zone de rayonnement ;
c) les *coordinatrices des femmes* élues des secteurs couverts par la zone de rayonnement ;
d) les *chargés de la jeunesse* élus des secteurs couverts par la zone de rayonnement ;

Les membres des comités de gestion doivent savoir lire et écrire en kinyarwanda ou en français / anglais.

**Article 12**
Les comités de gestion des systèmes de prépaiement des zones de rayonnement sont chargés de suivre la

**Article 13**
Chaque comité de gestion du système de prépaiement par zone de rayonnement choisit à la majorité absolue, au sein de ses membres, cinq délégués qui forment le bureau exécutif.
Dans le système de cogestion, le bureau exécutif est composé :

- d'un Président, représentant de la population
- d'un Vice-Président, représentant des prestataires des soins
- d'un Trésorier, représentant de la population
- d'un Secrétaire, représentant des prestataires des soins
- d'un Commissaire aux comptes, représentant de la population

Les membres du bureau exécutif sont élus pour un mandat de deux ans. Le cumul des mandats est limité à deux termes successifs.

**Article 14**
Le Président convoque et préside les réunions de l'Assemblée générale, du comité de gestion et du Bureau exécutif. Il assure les relations avec le centre de santé auqu
la convention de collaboration ainsi que les autres prestataires.
Le Vice-Président assure les fonctions du Président quand ce dernier est empêché.
Le Président et le Vice-Président représentent le système de la zone de rayonnement dans le comité de gestion de la fédération des systèmes.

**Article 15**
Le Trésorier recueille les ressources du système de prépaiement et en est responsable. Il représente le système de la zone de rayonnement dans le comité de gestion de la
et propose les moyens d'accroître les ressources du système de prépaiement. Toutes les ressources financières sont versées dans un compte bancaire avant toute utilisation. Il verse à la fédération la partie des cotisations affectées aux soins pour la couverture des soins des membres à l'hôpital du district. Le montant de ce versement sera déterminé par l'Équipe « Qualité, Évaluation et Management » et ne dépassera pas 20 pourcent du fonds affecté aux soins de santé. Il verse le paiement de base et le paiement de qualité au compte bancaire du centre de santé. Le paiement de base et le paiement de qualité sont
« Qualité, Évaluation et Management ». Il rédige et présente les comptes rendus financiers. Il est signataire, avec le Président et le Vice-Président des documents financiers du système de

**Article 16**
Le Secrétaire rédige les comptes-rendus des différentes rencontres qui se tiennent au sein du système de
ayonnement. Il assure la correspondance ordinaire du système. Il classe et conserve les différents documents relatifs au fonctionnement du système de prépaiement. Il saisit les informations des fiches d'adhésion des membres dans un tableau et l'envoie mens

Le bureau exécutif est composé :

- d’un Président, représentant de la population
- d’un Vice-Président, représentant des prestataires des soins

des zones de rayonnement.

**Article 29**
Le comité de gestion de la fédération des systèmes de prépaiement du District sanitaire se réunit tous les trois mois, le troisième dimanche du mois au siège du système de prépaiement dans le District sanitaire en session ordinaire, et chaque fois si cela est nécessaire, sur convocation du Président du Bureau exécutif ou sur proposition de la majorité du dit comité de gestion du système de prépaiement.

- les frais administratifs (salaires du personnel, frais de déplacement, loyer et fournitures des bureaux, etc.), et
- les réserves.

2. Le système de prépaiement affectera une partie de l'ensemble du fonds de collecte pour les soins de :
    - Il verse à la fédération des systèmes le pourcentage affecté aux soins pour la couverture des soins à l'hôpital du district.
    - Le système de prépaiement réservera le reste du fonds pour le paiement des prestations aux centres de santé qui sera échelonné sur les 12 mois de l'année de la manière suivante :

- le paiement de base au début du mois, dépendra du nombre des membres inscrits au centre de santé.
- le paiement de qualité à la fin du mois, dépendra des résultats de performance des centres de santé.

**Article 36**
L'adhérent à jour de ses redevances bénéficiera des prestations offertes par le système de prépaiement dans le District sanitaire de Kabgayi.

**Article 37**
Pour se prémunir contre l'érosion monétaire des cotisations, le système de prépaiement de la zone de rayonnement adoptera une politique d'investissement imm
pharmacie du district l'achat des médicaments chez CAMERWA ou dans les pharmacies privées. A partir du 1er septembre, ce financement sera donné comme emprunt à la pharmacie du district avec un taux
haque mois, la pharmacie du district remboursera les systèmes de prépaiement pour l'équivalent d'un dixième de tout le financement y compris l'intérêt. Ce financement est proposé par le trésorier et décidé par le bureau du comité de gestion du système de p
rayonnement, sous la supervision des commissaires aux comptes de la fédération.
Cet investissement a un triple avantage :

- la pharmacie du district aura assez de médicaments disponibles pour répondre à la demande des formations sanitaires,
- le système de prépaiement pourra payer les formations sanitaires mensuellement
- les formations sanitaires auront de l'argent pour payer les médicaments auprès de la pharmacie du district.

**Article 38**
A partir du 1er juillet 1999, l'adhésion au système de prépaiement entraîne une période d'attente d'un mois pour pouvoir bénéficier des droits d'un membre du système de prépaiement.

**Article 39**
A partir du 1er août 1999, le système de prépaiement prend en charge les services des soins de santé selon la convention de collaboration avec les centres de santé et l'hôpital du district.

**Article 40**
Le système de prépaiement ne peut avoir de propriétés autres que les actifs immobilisés nécessaires pour réaliser l'objet en vue duquel le système est formé.

**Titre 4.Les sanctions**

**Article 41**
Au niveau de la zone de rayonnement, l'Assemblée générale de tous les membres peut sur proposition du Comité de gestion du système de prépaiement prononcer des sanctions, allant jusqu'à l'exclusion, pour manquement grave commis au détriment du système de prépaiement.

**Article 42**
L'adhérent qui quitte le système de prépaiement, quelles que soient les raisons de son départ, perd tous les

**Article 43**
Le Tribunal de Canton du siège du système de prépaiement peut prononcer, à la requête soit d'un adhérent, soit d'un tiers intéressé, soit du Ministère de la Santé, la nullité de tout acte accompli par les organes du système de prépaiement, qui contreviendrait au Règlement Intérieur ou à la Loi.

**Title 5: Approbation et révision du Règlement d'Ordre Intérieur**

**Article 44**
Le système de prépaiement cesse d'exister par décision des deux tiers des membres réunis en Assemblée

**Article 45**
En cas de dissolution les biens du système de prépaiement seront attribués selon les décisions de la majorité des deux tiers des membres du système de prépaiement convoqués par le ou les liquidateurs du tribunal. A défaut de décision de la majorité des deux tiers des membres présents dans l'Assemblée le, le ou les liquidateurs donneront aux biens une affectation qui se rapprochera autant que possible de l'objet en vue duquel le système de prépaiement a été créé. Les membres, les créanciers et le Ministère

**Article 46**
Le présent Règlement d'Ordre Intérieur est approuvé par la majorité des deux tiers des membres du comité de gestion de la fédération des systèmes de prépaiement du District sanitaire dans sa réunion constitutive.

Le Comité de gestion de la fédération des systèmes de prépaiement propose une modification du présent -ci peut être modifié sur décision de la majorité des deux tiers des membres dans les Assemblées générales des systèmes de prépaiement des zones de rayonnement, et de la majorité des deux tiers de toutes ces Assemblées générales des systèmes de prépaiement dans le District sanitaire.

Les membres du Bureau exécutif du système de prépaiement de la zone de rayonnement de _____

Signatures, Dates, Lieux:

| | | | | |
|---|---|---|---|---|
| Le Président | Le Vice-Président | Le Trésorier | Le Secrétaire | Le Commissaire aux comptes |

**Approbation:**
**Les membres du Bureau exécutif de la fédération des systèmes de prépaiement du District de Kabgayi :**

Signatures, Dates, Lieux :

| | | | | |
|---|---|---|---|---|
| Le Président | Le Vice-Président | Le Trésorier | Le Secrétaire | Les Commissaires aux comptes |

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